

Staff Development in California

*Public and Personal Investments,
Program Patterns, and Policy Choices*

**Judith Warren Little
William H. Gerritz
David S. Stern
James W. Guthrie
Michael W. Kirst
David D. Marsh**



**A Joint Publication of
FAR WEST LABORATORY FOR
EDUCATIONAL RESEARCH AND
DEVELOPMENT • POLICY ANALYSIS
FOR CALIFORNIA EDUCATION (PACE)**

December 1987

The Staff Development Policy Study is a joint project of Far West Laboratory for Educational Research and Development and Policy Analysis for California Education (PACE). The study was funded by the California Postsecondary Education Commission. The views expressed herein do not necessarily reflect the views of the commission.

Additional copies of this paper, PC87-12-15-CPEC, are available by sending \$9.00 per copy plus tax to:

PACE
School of Education
University of California
Berkeley, California 94720

OR

Far West Laboratory for
Educational Research and Development
1855 Folsom Street
San Francisco, CA 94103

**CHECKS PAYABLE TO THE REGENTS OF
THE UNIVERSITY OF CALIFORNIA**

CHECKS PAYABLE TO FAR WEST LAB

Policy Paper No. PC87-12-15-CPEC
Policy Analysis for California Education (PACE)
Far West Laboratory for Educational Research and Development
Berkeley • San Francisco
December 1987

COMMISSION REPORT 88-23
PUBLISHED MARCH 1988

THIS is one in a series of consultants' reports on issues affecting faculty and staff development in California public education. These reports are brought to the California Postsecondary Education Commission for discussion rather than for action, and they represent the interpretation of the consultants rather than the formal position of the Commission as expressed in its adopted resolutions and reports.

A complete list of reports from the Commission's staff development project appears on the back cover under numbers 88-17 through 88-23.

Like other publications of the Commission, this report is not copyrighted. It may be reproduced in the public interest, but proper attribution to Report 88-23 of the California Postsecondary Education Commission is requested.

Contents

List of Tables and Figures	v
Acknowledgments	vii
Advisors to the Study	ix
Policy Analysis for California Education	xi
Far West Laboratory for Educational Research and Development	xiii
 I. Summary of Findings and Overview of the Study.....	1
Overview of the Study	1
Main Conclusions... ..	4
 II. Summary of Staff Development Investment by Taxpayers	11
Model for Describing Investments in Staff Development	12
Public Investment in California Staff Development.....	16
Summary of Taxpayer Investment in Staff Development.....	34
 III. The Organization and Delivery of Staff Development.....	37
Districts and Schools as Providers of Staff Development.....	37
Publicly Supported Staff Development Opportunities Outside the District.....	47
District Administrators' Appraisals of the Quality of Staff Development Providers	54
Summary of the Organization and Delivery of Staff Development.....	60
 IV. Teachers Participation in and Appraisal of Staff Development	63
Individual Teachers' Contributions to Their Own Professional Development..	65
Staff Development Teachers Received in Districts and Schools.....	68
The Staff Development Experiences of Beginning Teachers	76
Teachers' Appraisals of the Quality of Staff Development.....	78
Teachers' Influence Over Staff Development Decision Making.....	87
Summary Of Teachers' Participation in Staff Development	90
 V. Staff Development for Administrators	91
Public Investment in Administrators' Staff Development.....	93

VI. Policy Issues and Alternatives	99
The Evolution of Staff Development as a State Concern.....	99
Elements of a State Staff Development Policy.....	101
Appendix A: District Level Staff Development Cost Models.....	113
Appendix B: Sample Selection and Data Collection Methods.....	119
Appendix C: Supplemental Tables.....	123
Appendix D: References	129

List of Tables and Figures

Figure II-1	Components of Investment in Staff Development.....	13
Figure II-2	Conceptions of Investment in Staff Development.....	16
Table II-1	Estimated Taxpayer and Participant Current Investment in Locally Administered Staff Development (<i>Excluding</i> the Present Value of District and College/University Unit Credits)	18
Table II-2	Estimated Taxpayer and Participant Current Investment in Locally Administered Staff Development (<i>Including</i> the Present Value of District and College/University Unit Credits)	19
Table II-3	Patterns of Investment in Staff Development By Geographic Location	22
Figure II-3	Allocation of State Categorical Funds for K-12 Staff Development	25
Table II-4	Patterns of Categorical Program Allocation for Staff Development	26
Table III-1	Administration and Leadership of Staff Development	38
Table III-2	Who Leads District Staff Development?.....	39
Table III-3	Access to Classroom Follow-up and the Impact of Staff Development.....	45
Table III-4	County Office Administrators' Views of the Agency's Staff Development Role	49
Table III-5	Comparing Two Models of Regional Service	52
Table III-6	Administrator Preferences for Selected Program Conditions	55
Table III-7	What Quality of Service Do Districts and Schools Receive From External Staff Development Providers?	57
Table III-8	How Satisfied Were District Administrators With Leaders of Staff Development?.....	59
Table IV-1	What Teachers Contribute to District-Sponsored Staff Development	66
Table IV-2	Staff Development Investments in the Form of Salary Advances Based on Accumulated Semester Units	68
Table IV-3	Teacher Participant Hours Within Cluster Sample Districts By Schedule	71
Table IV-4	How Teachers Would Use Release Days	73
Table IV-5	What Level of Involvement in Classroom Observation Is Required to Produce an Impact on Teaching?	75
Table IV-6	Teachers' Preferences for More or Fewer Activities.....	77
Table IV-7	Teachers' Incentives for Staff Development	79
Table IV-8	The School Climate Supporting Staff Development	84
Table IV-9	Teachers as Leaders of Staff Development.....	85
Table IV-10	Peer Observation as Staff Development.....	86

Table IV-11	What Role Does the Local Bargaining Agent Play in District Staff Development?.....	89
Table V-1	What Staff Development Has Been Available to Improve Classroom Teaching for Administrators?.....	94
Table V-2	Estimated Taxpayer and Participant Investment for District and School Organized Administrator Staff Development.....	95
Table A-1	Net Present Value of Future Salary Table at the Cluster Sample Mean of \$84 Per Unit.....	118
Table C-1	Public Appropriation for Staff Development Programs for Teachers and Administrators.....	123
Table C-2	Estimated Total Costs for Teacher Staff Development Activities Within Cluster Sample During 1986 <i>Excluding</i> Present Value of Semester Unit Credits.....	126
Table C-3	Estimated Total Costs for Teacher Staff Development Activities Within Cluster Sample During 1986 <i>Including</i> Present Value of Semester Unit Credits.....	127

Acknowledgments

Assembling a portrait of staff development activity and investment in California has been a substantial task. The work of the study team was made both stimulating and feasible by the contributions of hundreds of others in schools, district and county offices, professional associations, universities, state agencies, and legislative offices.

The mosaic of staff development activity was painstakingly assembled from the work sessions we spent with nearly 400 district and school administrators or specialists in 32 districts. The word “interview” does not begin to capture the hours they devoted to helping us understand the letter and spirit of their undertakings or the work they did in preparing materials for us. Our grasp of local staff development was made still firmer by the surveys completed by administrators in nearly 300 additional districts. On many of the surveys, lengthy handwritten notes were a tribute to the care with which people approached the topic of professional development.

The views and experiences of individual teachers and administrators are easily lost in a study of this magnitude, especially one intended to inform decision making at the state level. This study has been enriched by the contributions of more than 1,000 teachers and administrators who took the time to complete surveys or participate in telephone interviews. The teacher who appended a three-page letter to a survey is just one of many who made the effort to say more than could be communicated on a questionnaire. We learned from all of them.

The contributions of the study’s advisory group were unprecedented in our experience. A diverse group of legislative staff, state-level decision makers, practitioners, and representatives of professional associations combined their knowledge and experience to help shape the study’s design and interpret the study’s conclusions as they emerged. During four day-long meetings spread over a year, the group gave close scrutiny to the study’s basic questions, methods, and findings. Discussions were lively and debate sometimes heated, but each gathering moved the study forward.

Our team of data collectors brought to the study a lively intellectual curiosity matched by discipline and organization. They met a grueling schedule and still managed to preserve their good sense and good humor. The words of this text are the product of its authors; many of its observations and insights we owe to Nanci Anderson, Juan Arriola, Helen Cagampang, Carolyn Cogan, Colleen Conaway, Julia Koppich, Vince Laura, Donna Kay LeCzel, Nancy Merino, Kathy Phillips, Fran Powell, René Verdin, Dorothy Walters, and Linda Ziegahn. Special thanks to Dan Zalles, who handled all of the data processing, and to Julia Koppich, who read and critiqued numerous drafts of the report.

Finally, William Haldeman and Mary Sandy of the California Postsecondary Education Commission gave thoughtful and thorough attention to each stage of the work. By their capable monitoring and support of contract matters, they enabled us to devote our full attention to the study. And by their patience in the face of inevitable difficulties, they helped us to remain sane while we concentrated on productive solutions.

Over a period of one year, detailed accounts of staff development activities have evolved into a portrait of staff development in California. We are thankful to the report's many contributors, all of whom share a stake in improving the quality of teaching and learning in California. However, we retain full responsibility for the conclusions presented here and for whatever errors of fact or flaws in interpretation might remain.

Advisors to the Study

School Professionals

David N. Evans, Superintendent
San Juan Union School District
Donna Kay LeCzel, Teacher
San Francisco Unified School District
Carol Teall, Director of the Management Academy
San Diego County Office of Education
Philip Bowman, Retired Superintendent
Vallejo Unified School District
Susan Taira, Consultant
Professional Development Center
Los Angeles Unified School District
Harley North, Superintendent
Evergreen Union School District
Miriam Studley, Teacher
Pleasant Valley School District
Grace Matteis
Orange County Office of Education

Association of California School Administrators

Jodie King, Director of Professional Development

California Federation of Teachers

Miles Myers, President

California Teachers Association

Deborah Edginton, Manager
Instructional and Professional Development

Governor's Office

Anne McKinney, Assistant Advisor
Education

California State University

Jennie Spencer Greene, Assistant Dean
Academic Programs and Policy Studies

University of California

Janice Cox, Senior Analyst

Commission on Teacher Credentialing

Michael McKibbin, Consultant
Program Evaluation and Research

California School Boards Association

Linda Leopardi, Policy Director

County Superintendents Association

Louis Bosetti, Superintendent
Tehama County Office of Education

State Department of Education

James R. Smith, Deputy Superintendent
Curriculum/Instructional Leadership Branch
Sally Mentor, Division Director
Instructional Support Division

Department of Finance

Frank Schultz, Budget Analyst

Office of the Legislative Analyst

Paula Mishima, Program Analyst

Legislative Staff

Linda Bond, Senior Consultant
Senate Education Committee
William Furry, Consultant
Minority Ways and Means Committee
Janet Jamieson, Consultant
Assembly Minority Caucus
Glee Johnson, Consultant
Senate Minority Fiscal Consultant
Rick Simpson, Consultant
Assembly Education Committee
Subcommittee on Educational Reform

Observers

Fred Tempes, Instructional Support Services
Division, State Department of Education
Bill Padia, Program Evaluation and Research
State Department of Education
Laura Wagner, Intersegmental Relations Division
State Department of Education
Judy Kingsley, Governmental Affairs
State Department of Education

Policy Analysis for California Education

Policy Analysis for California Education, PACE, is a university-based research center focusing on issues of state educational policy and practice. PACE is located in the Schools of Education at the University of California, Berkeley and Stanford University. It is funded by the William and Flora Hewlett Foundation and directed jointly by James W. Guthrie and Michael W. Kirst. PACE operates satellite centers in Sacramento and Southern California. These are directed by Gerald C. Hayward (Sacramento) and Allan R. Odden (University of Southern California).

PACE efforts center on five tasks: (1) collecting and distributing objective information about the conditions of education in California, (2) analyzing state educational policy issues and the policy environment, (3) evaluating school reforms and state educational practices, (4) providing technical support to policy makers, and (5) facilitating discussion of educational issues.

The PACE research agenda is developed in consultation with public officials and staff. In this way, PACE endeavors to address policy issues of immediate concern and to fill the short-term needs of decision makers for information and analysis.

PACE publications include Policy Papers, which report research findings; the Policy Forum, which presents views of notable individuals; and Update, an annotated list of all PACE papers completed and in progress.

Advisory Board

Mario Camara
Partner
Cox, Castle & Nicholson

Constance Carroll
President, Saddleback
Community College

Gerald Foster
Region Vice President
Pacific Bell

Robert Maynard
Editor and President
The Oakland Tribune

A. Alan Post
California Legislative Analyst,
Retired

Sharon Schuster
Executive Vice President
American Association of University Women

Eugene Webb
Professor, Graduate School of Business
Stanford University

Aaron Wildavsky
Professor of Political Science
University of California, Berkeley

Far West Laboratory for Educational Research and Development

Far West Laboratory for Educational Research and Development is a public, nonprofit agency established in 1966 under Title IV of the Elementary and Secondary Education Act. The Laboratory is located in San Francisco's Mission District. Since its inception, the Laboratory's principal goal has been to help individuals of all ages obtain more and better learning opportunities as a result of its research, development, dissemination, evaluation, and technical assistance activities.

The Laboratory is governed by a board of directors whose 31 members represent private and public education, business, and community in a service region that includes Arizona, California, Nevada, and Utah. Under the leadership of the Laboratory's director, program work is organized within four Centers:

Laboratory Director

Dean Nafziger

Laboratory programs:

Teaching and Learning
Child and Family Studies
Organizational Development
Educational Improvement
and Policy Support

Carolyn S. Cates, Director
Ron Lally, Director
Lynn Jenks, Director
Robert Peterson, Director

An extensive program of regional services is sponsored by the Office of Educational Research and Improvement of the U.S. Department of Education. This program includes a collaborative partnership with the California State University, based on the Northridge campus. Other major program activities have been funded by the California State Department of Education, California State University, California Postsecondary Education Commission, U.S. Department of Education National Science Foundation, private foundations, and other state and local education agencies.

The Laboratory issues a quarterly newsletter, *Resources and Practice*, as well as periodic *Research Briefs* and *Policy Briefs*. A catalogue of publications and products is available free of charge.

I. Summary of Findings and Overview of the Study

The California Staff Development Policy Study was initiated by the legislature and governor in response to a steady escalation in the number and costs of staff development programs. Results of the study will be used to assess the possibilities and limitations of staff development as an instrument of state and local policy intended to improve the quality of classroom teaching and learning.

For purposes of this study, staff development is defined as

...any activity that is intended partly or primarily to prepare paid staff members for improved performance in present or future roles in the school district.... The term staff member is limited in scope [to include] all certificated personnel and teachers' aides.

The study was designed to aid policy makers by answering four basic questions:

1. What is the total California taxpayer investment in staff development and what forms do the investments take?
2. How are staff development activities administered, organized, delivered, and evaluated; and by what approaches do these activities achieve their goals?
3. How do teachers and administrators judge the quality and effectiveness of the staff development activities in which they participate?
4. What policy and program options might the state pursue in order to improve the classroom benefit associated with staff development?

OVERVIEW OF THE STUDY

Presumably, staff development affects students' current learning and future opportunities by contributing to *teachers'*

- up-to-date knowledge of curriculum content
- range of teaching methods
- ability to diagnose student learning and evaluate student progress

- commitment to and enthusiasm for teaching
- ability to evaluate the strengths and weaknesses of their own teaching

Similarly, staff development may affect students' learning by contributing to *administrators'*

- ability to plan and organize staff development consistent with schoolwide goals and problems
- ability to organize adequate support for the daily work of teaching
- ability to evaluate teaching

Sources of Data

Four main data sources form the basis of this report:

1. Description of Local Patterns of Staff Development. The heart of the study is a description of local policies and practices of staff development, derived from a scientifically selected sample of 30 districts. The sample districts range in enrollment from less than 400 students to more than 50,000 and from large urban districts to rural districts remote from sources of professional development activity. Data were collected on more than 800 discrete staff development activities and on the responsibilities of district- and school-level staff development leaders. Hours of interview time were logged with 280 district staff developers and nearly 100 principals. Extensive telephone interviews were completed with over 460 teachers in the 30 districts. In addition to the data collected from the 30-district probability sample, the study also obtained interviews and materials from district administrators, site administrators, and teachers in Los Angeles and San Diego.

2. Teacher and Administrator Surveys. Individual teachers and administrators contributed their views of the content, format, and value of various staff development opportunities. Altogether, more than 1,300 school professionals provided their views of the current array of staff development options. Mail surveys were conducted of teachers (N=749) and administrators (N=117), supplemented where appropriate by examples provided by the teachers interviewed by telephone (N=460).

3. Survey of Districts and Counties. Districts and schools are both providers and consumers of staff development services. A statewide survey of all districts and counties elicited information about program and policy choices, funding sources, and costs. This survey completed the broad picture of how staff development resources are used and ensured that all districts would have an opportunity to contribute to the study's findings.

The district survey was completed by 265 of the state's 1,026 districts (26%) and by 30 of the state's 58 counties (52%). Enrollments in the 265 districts ranged from less than 10 to Los Angeles's enrollment of more than 600,000. The responding counties ranged from the largest urban to the most isolated rural counties. Survey data from district and site administrators were used to describe local levels of confidence in specific staff development agencies and types of staff development leadership.

4. State-Level Program Descriptions and Program Evaluations. Documents supplied by the State Department of Education provided the legislative authorization, program regulations, program history, and current status of more than 20 state-funded or state-administered federal programs. The inventory included programs specifically intended for staff development, as well as categorical programs or general school improvement programs for which staff development was one component.

Limitations of the Study

The California Staff Development Policy Study is a descriptive inventory of the policy and program choices reflected in local staff development, based on detailed, comprehensive program and cost data on actual staff development activities. *It is not an evaluation, nor is it designed to trace the impact of staff development initiatives into the classroom.*

However, the study approaches the issue of "effectiveness" in two oblique ways. First, it draws upon consumers' own appraisals of staff development, collected as part of this study. Although self-report data are an inadequate guarantor of effectiveness, they do assist in distinguishing those approaches for which support is strongly established from those for which teachers and administrators reserve their strongest criticism.

Second, the study estimates probable effectiveness by appraising common local configurations against a standard established by the available research literature in staff development. For some approaches, such as skill training, the research record is reasonably informative. For other approaches, such as regional service centers, mentors, or direct monetary subsidies of teachers, there is less guidance in the research literature. Further, there simply is no established body of staff development research that connects staff development models with student outcomes. At best, judgments of effectiveness can be made on the basis of whether a program affects the intermediate objectives of enhanced knowledge, skill, commitment, and apparent classroom practice among teachers.

MAIN CONCLUSIONS

This year-long examination of staff development in California yields eight main conclusions. This summary of conclusions and the text that follows employ the logic and language of *investment*. In doing so, it is important to acknowledge that any dollar spent on staff development is a dollar not spent on other educational purposes, including instruction. However, the investment orientation also permits policy makers to take a future-oriented view toward the value of current staff development. It positions them to address the problem of return on investment and to judge staff development resources by their prospects (or demonstrated ability) to improve the capacities and commitments of California's educators.

Finding #1. Staff development programs and services for teachers and administrators consume approximately 1.8 percent of California's education funding, a total of \$366 million during a one-year period.

- Taxpayers' contribution to the "direct costs" of staff development programs and services consists of five parts: (1) approximately \$88 million in state funds appropriated specifically for staff development, (2) an estimated \$34 million for staff development linked to other state categorical aid programs, (3) an estimated \$34 million for staff development associated with federal categorical aid programs administered by the state, (4) approximately \$70 million in the costs of public university graduate instruction not covered by student fees, and (5) approximately \$140 million in allocations from local district and county general fund budgets.
- The average annual "direct" expenditure for local staff development activities (excluding university courses) is approximately \$1,360 per teacher and \$1,800 per administrator. (When the taxpayer subsidy for graduate-level university instruction is included, the total average investment per certificated employee is slightly over \$1,700). Of the total investment in teachers, 90 percent (\$1,229) is controlled at the district level. Of that amount, \$912 or 70 percent of the non-university total consists of monetary outlay in support of programs. The remaining \$317 is a figure calculated to represent reallocated instructional time.
- Public dollars spent directly on staff development activities at the district level amount to \$912 per teacher. An average of \$430 per teacher supports teachers' participation by paying for substitutes, stipends, facilities, materials, and travel. The salaries of district specialists who plan and lead staff development services account for about \$400 per teacher. External consultants and presenters account for an additional \$82 per teacher.
- Governmental spending on staff development is supplemented by participants' private contributions of time and money. For every dollar that districts spend on

staff development activities, participants contribute another 60 cents in uncompensated time.

- The largest share of staff development programs and services is managed directly by districts and schools through the local administration of state categorical programs, policies governing release time of teachers and other conditions of professional development, and collectively bargained agreements regarding teacher salary advances.
- The current direct public investment in teachers' and administrators' professional development appears to be a modest one by private sector corporate standards. While comprehensive data are not available on corporate staff development, examples provided informally suggest that it is not uncommon for corporations to invest more than \$1,500-\$2,000 per year on staff with professional or managerial responsibilities.

Finding #2. The future financial obligation for salary advances that teachers accrue as a result of advanced university courses or salary credits awarded by the district is taxpayers' largest investment in staff development.

- The bulk of taxpayer investment in teachers' professional development—nearly \$600 million during a one-year period—is in the form of future salary obligations made to teachers who accrue credits by enrolling in university course work or by attending district-sponsored activities outside the salaried workday. When future salary increments are added to current “direct costs,” monetary and nonmonetary expenditures, the total taxpayer investment exceeds four percent of total education funding and approaches \$1 billion per year.
- Linking continuing education to salary advances by the use of uniform salary schedules is a widespread feature of American school governance. In California, the present value to a teacher of future salary increments resulting from an additional semester unit is approximately \$1,400; the average annual increment received by an individual teacher is \$84 per unit. Local policy makers exert control over this expenditure insofar as they establish criteria and procedures to regulate the award of credits that teachers apply toward salary increases.

Finding #3. California teachers and administrators demonstrate a firm commitment to improving their own knowledge and practice.

- For every dollar spent by districts and schools directly on formal staff development activities, individual teachers personally contribute 60 cents in volunteer time, with no present or future financial compensation.

- Despite the relative absence of extrinsic incentives or rewards for improving professional performance, the vast majority of teachers desire more, not less, staff development opportunities. They list “access to new ideas” as their number one motivation for attending conferences or workshops.
- Among teachers, consistent supporters of staff development activities outnumber consistent critics six to one. The consistent supporters are more likely to be employed in schools that make professional development an accepted part of daily work, schools in which teachers and administrators together play a major role in deciding, planning, arranging, or leading staff development.

Finding #4. Local school district capacity to organize and deliver staff development has grown steadily.

- District administrators and staff developers display considerable sophistication about the preferred design of staff development activities. They favor activities closely linked to major district or school priorities, measured in days, not hours, with an appropriate combination of content and methods and accompanied by classroom-based consultation.
- Compared to the involvement, influence, and sophistication of central office personnel, teachers have remained relatively uninvolved, uninfluential, and unsophisticated about options for professional development purpose, content, and form. Less than 10 percent of all participant hours in staff development activity is a direct result of teachers’ planning and leadership.
- Staff development is a relatively centralized activity within medium-sized and large districts, planned and delivered by district specialists, administrators, and external presenters or consultants. At the local level, the largest expenditure for staff development programs is “leader time”—the salary cost of the specialists and administrators who plan and lead staff development activities.
- In the absence of any comprehensive and cost-effective strategy for overcoming problems of distance, teachers and administrators in the state’s vast rural areas enjoy fewer professional development opportunities than their counterparts who have easier geographic access to staff development providers.
- Noteworthy examples of staff development exist in districts, county offices of education, and universities. The main features of these programs can be identified and thus might be supported on a larger scale.

Finding #5. Selected staff development activities have sound prospects for favorably influencing classroom performance and the overall quality of school programs. On the

whole, however, the current array of staff development activities and incentives is unlikely to yield substantial change in the thinking or performance of California's classroom teachers.

- Teachers describe worthwhile staff development in terms that are consistent with prior research: effective staff development is closely tied to current instructional assignments and circumstances and permits intensive study by pursuing one or two key topics over a period of weeks or months.
- Despite the knowledge, intentions, and preferences of most district staff developers, relatively few staff development activities are linked to a well established school support system, and relatively few teachers believe they are accountable for using (or at least testing) what they learn. Intellectual content is often thin.
- Classroom and school reinforcement, or follow-up, appears to be effective in ensuring that staff development translates to classroom effectiveness, but it occurs infrequently. Few teachers (less than 10 percent) devoted 50 or more hours to follow-up from staff development in a one-year period, but those few teachers were four times more likely to report large classroom effects than were teachers who devoted less than 10 hours to follow-up.
- The quality of staff development is constrained by the sheer number of demands on teachers' time. When the salaried workday and work year provide teachers with relatively little out-of-classroom time, teachers' opportunities for productive staff development dwindle and their commitments to professional improvement are compromised.

Finding #6. California's staff development resources are deployed in ways that generally reinforce existing patterns of teaching, conventional structures of schools, and long-standing traditions of the teaching occupation.

- Staff development is largely market driven; that is, it consists of a lengthy menu of discrete offerings available on a sign-up basis to individual teachers who "receive" information or materials from paid presenters. The training "industry" has dominated local district conceptions of staff development, and most professional development opportunities take the form of skills-oriented or materials-oriented workshops.
- Staff development does little to alter the isolated and isolating character of classroom teaching or to engage teachers themselves in an intellectually rigorous examination of curriculum and teaching methods. It occurs on the periphery of school and classroom life, a situation exacerbated and perpetuated by funding

patterns, by a marketplace glutted with short-term skill training, and by a daily and yearly schedule that squeezes staff development into widely separated days or hours.

- Individual examples confirm that staff development can be structured to support a more professionalized teaching force and to support schools that improve steadily. Nonetheless, the study revealed few intensive, long-term involvements planned and carried out by groups of teachers with common instructional assignments, using resources under their own control. A few aggressive attempts to parlay the mentor role into a faculty leadership position, or to exploit leadership roles already in place (department chairs, for example) were found. However, teachers were rarely involved in shaping the content and form of staff development or involved in evaluating its impact.
- Selected state initiatives are consistent with forces of professionalization in teaching. The *Mentor Teacher Program* has evolved steadily; mentors are far less likely to spend their time developing curriculum on their own and far more likely to work directly with other teachers. In conception, the *Classroom Teacher Instructional Improvement Program* rewarded teacher initiative and required a plan that would yield benefit in the classroom. The *Cal Writing Project* has demonstrated that a teacher-driven model of professional development, built on university-school collaboration and fixed firmly on student learning, can be both effective and efficient. The *California School Leadership Academy* was inspired by developments in school research, with its vivid descriptions of effective school leadership, and by the implementation demands associated with state reforms (especially the Model Curriculum Standards). These state-sponsored programs are in various states of maturity. Each has its favorable features and each has its flaws. Each is premised on assumptions that deserve—and often elicit—discussion and debate. As a group, however, they exemplify the state's attempt to develop or support staff development that advances the professionalization of teaching and of the school as an institution.

Finding #7. California's staff development activities are largely unevaluated.

- Staff development activities are evaluated regularly on a session-by-session basis that assists trainers in refining their activities; the most extensive evaluation efforts are intended to improve discrete staff development activities.
- Staff development is rarely evaluated for the importance or coherence of its overall program goals, for the relationship between staff development goals and other school improvement goals, or for the match between goals and strategies (ends and means). (There are instructive exceptions to this rule, such as the evaluation

portfolio assembled by the California Writing Project and the two-year evaluation of district professional development assembled by one California district.)

- The consequences of staff development are almost never tested at the classroom level. Program evaluations are dominated by user participation rates and other process measures; summative measures of classroom effectiveness are fewer and methodologically weaker.
- The impact of some of the most innovative, potentially promising, and costly state-funded initiatives, such as the Mentor Teacher Program, is largely unknown. Resources for program evaluation are rarely sufficient to gauge progress in program development or to assess the merit of particular strategies as they mature.
- Staff development is generally *disconnected* from personnel evaluation. Teachers and district administrators advocate rethinking this arrangement.

Finding #8. The state annually appropriates staff development funds for teachers, schools, districts, counties, and universities, but it lacks a comprehensive or consistent policy orientation toward staff development or toward institutions that provide it.

- State-supported staff development is an activity in the service of other educational purposes. In principle, staff development provides the content knowledge and pedagogical skill essential for curricular or instructional reforms. It enhances teachers' success with the state's diverse student population. It enriches the supply of rewards and incentives that influence teachers' long-term commitment to teaching. It enables schools to tackle more demanding school improvement agendas. That is, it serves multiple goals.
- Despite the multiplicity of staff development purposes evident in the inventory of state-funded programs, there appears to be no clear view of the relationship between any one purpose and the institution(s) best equipped to pursue it. The proportion of funds allocated to teachers, schools, districts, counties or regional agencies, and universities reflects a combination of deliberate strategy and historical accident.
- The growth in state-supported staff development activity has been accompanied by a proliferation of new agencies, outside the mainstream institutions. The rise of new staff development providers (mostly regional services housed in county education offices) contrasts with the relative lack of change in basic structures for organizing teachers' or administrators' work and their preparation for that work.

*

*

*

*

Section II concentrates on the dollar investment in staff development. Section III describes the prevailing organization of staff development services; necessarily, it glosses over some of the rich variation in local approaches to highlight main patterns. Section IV reports the experiences of classroom teachers: what teachers want, what they receive, and what they think of it. Section V summarizes staff development for administrators, with an emphasis on activities designed to influence the quality of classroom instruction. Finally, Section VI examines policy options and issues arising from this research.

II. Summary of Staff Development Investment By Taxpayers

Approximately four out of every five dollars invested in teachers' and administrators' professional development are derived from taxpayers in one form or another. The remaining investment is made by teachers and administrators in the form of uncompensated time or out-of-pocket expenses. This section describes a model for estimating all staff development investments and then summarizes the portion contributed by California taxpayers during a one-year period. The section begins with two disclaimers.

First, the following procedure almost certainly underestimates the total investment in staff development. Some activities in sample districts will have gone undetected, professional development opportunities outside districts will be less fully described than those sponsored by districts or schools, and the many informal ways in which teachers and administrators became better at their work remain largely invisible. The most accurate estimates of school- and district-level staff development. Estimates of county or university services are less accurate. Because most professional development choices are made (and costs borne) at the individual, school, and district levels, this study concentrates on ensuring reasonable estimates for those levels.

Second, the "need" for staff development, broadly construed, will always outstrip available resources. Over the span of a career, teachers must add depth to their understanding of subject matter and must remain current with new developments in the disciplines; they must master instructional methods suited to a changing student population and to evolving public expectations of public education. Staff development needs thus vary for teachers at different stages of a career and for teachers in radically different community situations. In addition, teachers and administrators share some, but not all, definitions of need for staff development. Teachers attend most closely to the immediacy of the individual classroom; administrators scan a broader horizon, attempting to satisfy larger institutional goals.

Thus, this study is unable to judge an appropriate level of support for staff development on the basis of some absolute standard of "need." Rather, estimates that follow will be most helpful in deciding a reasonable level of staff development support as a proportion of total education funding and in deciding where and how taxpayer investment will be made.

This section provides an overview of current state and local investment in staff development. The overview is followed in sections III, IV, and V by a more detailed description at the pattern of staff development opportunities available to teachers and administrators.

A MODEL FOR DESCRIBING INVESTMENTS IN STAFF DEVELOPMENT

Investment in staff development means that resources that might have been used in other ways are allocated to efforts to improve the skill or knowledge of teachers or other school staff. The major resource invested in staff development is time spent by participants and leaders in staff development activities. Compared to the value of time, the value of other resources (materials and facilities) used for staff development is small.

Figure II-1 displays the breakdown of resources devoted to staff development by major categories. The first distinction is between resources invested by taxpayers and those invested by participants themselves. (Participants, of course, are also taxpayers. Each teacher and administrator also has a taxpayer's stake in the productive investment of limited public resources.)

Investment by Participants

Participants invest in their own professional development when they engage in these activities on their own time and do not receive any compensation in the form of current stipends or future salary increases tied to these activities. Most of the investment by participants in these uncompensated activities is in the form of time, not money; but for purposes of comparison with the value of other resources, this study translates time into money by valuing each hour at the participant's professional salary rate.

Also, teachers and other school staff sometimes make out-of-pocket cash payments to attend conferences, workshops, or courses. These nonreimbursed payments are part of participants' own investment in their professional development.

Contributions of time and money that California teachers and administrators made to their own professional development during a one-year period are described in sections IV and V.

Figure II-1 Components of Investment in Staff Development

Total Investment Equals		
Investment by taxpayers	plus	Investment by participants
<ul style="list-style-type: none"> • Cost of participants' time <ul style="list-style-type: none"> Substitutes Stipends Reduced instructional time Future salary increases • Cost of producing staff development activities <ul style="list-style-type: none"> Leaders' time Facilities and materials External consultants, presenters 		<ul style="list-style-type: none"> • Value of time for which participants are not compensated • Out-of-pocket expenses for which participants are not reimbursed

Resources for staff development that are not invested by participants themselves are invested by taxpayers. Figure II-1 divides taxpayers' investment into two major categories: investment of participants' time and production of staff development activities.

Investment by Taxpayers in Participants' Time

The amount of participants' time that taxpayers support depends on how staff development activities are organized. If activities for classroom teachers take place when classes are in session, so that substitute teachers must be hired, then the cost of the substitutes is part of the taxpayers' investment in those staff development activities. If workshops or other activities are scheduled outside regular work time, the public school employer or other sponsoring public agency may pay additional stipends or honoraria to compensate participants for attending, and such stipends are included in the investment by taxpayers. Alternatively, some professional development activities count for course credit which enables participants to advance on their salary schedule. In contrast to stipends paid in the same time period as the staff development activity, salary increases tied to current staff development activity are paid in future installments. The discounted present value of these future salary increases is part of taxpayers' investment in these activities. (For a detailed explanation of how this study computed the cost of future salary increases, see Appendix A.)

A question sometimes arises about why it is appropriate to count future salary increases as part of the investment in staff development. The amount of salary credit teachers receive for participation in staff development activities is determined by local district policy and collective bargaining. It can be argued that if teachers were for some reason prevented from receiving salary increases tied to participation in staff development, local policy and collective bargaining eventually would provide teachers the same amount of salary increases anyway. This may be true in some long-run sense. However, given the policies and salary schedules in place during 1986 (or any other past year), salary increases tied to participation in staff development activities must be included as part of taxpayers' investment in staff development.

Participants' time spent in staff development also represents an investment by taxpayers when activities take place during a regular workday but while classes are not in session, if those activities reduce the amount of time that teachers and other professional staff would otherwise have spent on instruction. For example, professional development activities are sometimes scheduled during "minimum days" or "staff development days," when classes are cancelled or shortened in order to make time for staff development during teachers' regular workdays. The resource used for staff development in these instances is not in the form of extra money paid to teachers but in the form of reallocated instructional time. The value of that time is an investment by taxpayers. It can be translated into money by valuing participants' time at their professional rate of pay.

Investment by Taxpayers in Producing Staff Development Activities

Apart from the time of teachers and others who participate as learners, staff development activities also use other resources, the largest of which is the time of those who plan, organize, and lead them. This includes the salaries of district or county office employees whose job descriptions include specific responsibility for staff development. It also includes other administrators or teachers whose job responsibilities consist mainly of other duties but who spend some time planning, organizing, or leading one or more staff development activities. Staff development leaders may not be employees of the public schools, but they may be hired under contract to provide staff development activities.

Finally, a complete accounting of resources invested in staff development must include facilities and materials required to produce staff development activities. In gathering data on staff development activities sponsored by districts and schools, the study asked specifically about materials. The cost of facilities and equipment were estimated by adding an indirect cost factor to the direct costs of activities sponsored by districts and schools. (See Appendix A for exact computations.)

For staff development activities organized by sample districts or schools, the study obtained separate estimates of the time spent by staff development leaders and the use of facilities and materials, then added these together to compute the investment in producing staff development activities. However, for professional development activities outside the district, such as conferences or courses for which the district paid, the study estimated the cost of production by the registration fee.

Conceptions of Investment

Figure II-2 displays four ways to define the amount invested in staff development. The narrowest conception of investment is current money outlays by taxpayers for staff development activities. This includes the cost of substitute teachers, stipends, and producing staff development activities.

A second conception of investment includes all monetary outlays by taxpayers resulting from current staff development activities and adds the present value of future salary increases tied to current staff development.

A third investment concept which is broader still includes nonmonetary as well as monetary investment by taxpayers, where the nonmonetary element is the value of reduced instructional time resulting from staff development activities that occur by keeping students home during regularly scheduled instructional time (e.g., a pupil-free day).

Finally, the most encompassing definition of investment includes not only the whole investment by taxpayers but also that of participants who engage in professional development on their own time, with no current or future compensation.

For practical purposes of budgetary policy, the first and second definitions are most relevant, but the third and fourth definitions provide more complete measures of the value of resources being invested in staff development.

Figure II-2 Conceptions of Investment in Staff Development**Level I:**

Current monetary
investment in staff
development activity

$C1 =$ cost of substitutes, leader time, stipends, facilities

Level II:

Current and future
monetary Investment

$C2 = C1 +$ present value of future salary increases accrued
as a result of staff development

Level III:

All monetary investment
plus estimated value
of reduced instructional
time

$C3 = C2 +$ reduced instructional time

Level IV:

All taxpayer investment
plus participants invest-
ment of time and money

$C4 = C3 +$ participants' time and money

The following question sometimes arises: Why should payments by teachers (cash or uncompensated time spent on staff development) be added together with payments to teachers (stipends or salary increases) in calculating total investment in staff development? The answer is that teachers' time spent in staff development activities is a resource that could have been used in other ways. The value of that resource does not depend on whether staff development activities are scheduled during teachers' regular work time or not. The scheduling of staff development activities determines who pays for the investment of teachers' time but not how valuable that investment is.

PUBLIC INVESTMENT IN CALIFORNIA STAFF DEVELOPMENT

Staff development investment is distributed across multiple levels of the K-12 education system. Each level offers policy makers the opportunity to exploit distinct avenues to classroom improvement; each level also confronts policy makers with a set of limitations and constraints.

School- and District-Level Support

Districts and schools are home to staff development activity for most California educators. When the current monetary expenditures for formal staff development programs are combined with the present value of future salary obligations and with an "opportunity cost" estimate associated with reallocated instructional or administrative time, the district and school expenditure approaches 83 percent of all staff development investment. Even excluding the large salary burden associated with staff development, district- and school-level staff development programs compose more than half of categorical staff development. The most crucial policy choices are made, and the heaviest costs borne, at the local level.

Districts receive both general fund and categorical fund support from the state,¹ some share of which they devote to staff development. How are these local resources allocated? Tables II-1 and II-2 provide additional detail on resources invested in all staff development activities administered by districts and schools in 1986. Each table displays the size of the investment per ADA, per person, and per participant hour; in addition, each component of the investment (such as the cost of substitutes) is shown as a percentage of total staff development investment and in comparison to the total estimated costs of supporting a California classroom (about \$93,000).

At the district and school levels, staff development costs are offset substantially by the value of uncompensated participant time. Volunteer time by teachers and administrators amounts to nearly \$500 per person, most of it borne by teachers.² Tables II-1 and II-2 incorporate the investment made by participants themselves through contributions of uncompensated time. These estimates do not include participants' out-of-pocket expenses or uncompensated time spent in formal or informal staff development not sponsored or otherwise officially sanctioned by a district.

¹ The relative contributions to staff development made from general funds and from categorical funds cannot be determined with precision (at least not without a fiscal and program audit of far larger magnitude than this study represents).

² This is not to say that individual teachers are more inclined to volunteer their time than individual administrators. Rather, the figures for participants' volunteer time that appear in Tables II-1 and II-2 are all tied to the recorded staff development activities in the sample districts. Of all participant hours, approximately 90 percent were devoted to teachers. Data on teacher staff development is presented separately in Appendix C, Tables 2 and 3.

Table II-1 Estimated Taxpayer and Participant Current Investment in Locally Administered Staff Development

*(Excluding the Present Value of Semester Unit Credits)
Based on Interviews with 280 Staff Development Administrators
and 97 School Leaders in the 30-district sample*

	Cost Per ADA	Cost Per Participant Hour	Cost Per Person Member	Percentage of Total SD Costs	Percentage of Total Classroom Costs
Substitutes	\$10.03	\$2.61	\$207.89	12.12%	0.24%
External Providers	\$4.00	\$1.04	\$82.83	4.83%	0.10%
Miscellaneous and Facilities	\$2.64	\$0.68	\$54.64	3.19%	0.06%
Stipends	\$6.67	\$1.73	\$138.20	8.06%	0.16%
Leaders' Time for Planning & Delivery	\$20.67	\$5.37	\$428.52	24.98%	0.50%
LEVEL I SUBTOTAL: Taxpayers' Current Monetary Investment	\$44.00	\$11.43	\$912.08	53.18%	1.06%
Present Value of Future Salary Increases Resulting From Additional Semester Units	\$0.00	\$0.00	\$0.00	0.00%	0.00%
LEVEL II SUBTOTAL: Taxpayers' Current & Future Monetary Investment	\$44.00	\$11.43	\$912.08	53.18%	1.06%
Value of Reallocated Instructional Time	\$15.29	\$3.97	\$317.00	18.48%	0.37%
LEVEL III SUBTOTAL: Taxpayers' Total Investment	\$59.29	\$15.40	\$1,229.08	71.66%	1.43%
Investment by Participants	\$23.46	\$6.09	\$486.23	28.35%	0.56%
LEVEL IV TOTAL: Combined Investment by Taxpayers and Participants	\$82.74	\$21.49	\$1,715.31	100.01%	1.99%

Table II-2 Estimated Taxpayer and Participant Current Investment in Locally Administered Staff Development

*(Including the Present Value of Semester Unit Credits)
Based on Interviews with 280 Staff Development Administrators
and 97 School Leaders in the 30-district sample*

	Cost Per ADA	Cost Per Participant Hour	Cost Per Staff Member	Percentage of Total SD Costs	Percentage of Total Classroom Costs
Substitutes	\$10.03	\$2.61	\$207.89	4.75%	0.24%
External Providers	\$4.00	\$1.04	\$82.83	1.89%	0.10%
Miscellaneous and Facilities	\$2.64	\$0.68	\$54.64	1.25%	0.06%
Stipends	\$6.67	\$1.73	\$138.20	3.16%	0.16%
Leaders' Time for Planning & Delivery	\$20.67	\$5.37	\$428.52	9.79%	0.50%
LEVEL I SUBTOTAL: <i>Taxpayers' Current Monetary Investment</i>	\$44.00	\$11.43	\$912.08	20.83%	1.06%
Present Value of Future Salary Increases Resulting From Additional Semester Units	\$128.50	\$33.38	\$2,663.75	60.83%	3.10%
LEVEL II SUBTOTAL: <i>Taxpayers' Current & Future Monetary Investment</i>	\$172.50	\$44.81	\$3,575.83	81.66%	4.15%
Value of Reallocated Instructional Time	\$15.29	\$3.97	\$317.00	7.24%	0.37%
LEVEL III SUBTOTAL: <i>Taxpayers' Total Investment</i>	\$187.79	\$48.78	\$3,892.83	88.90%	4.52%
Investment by Participants	\$23.46	\$6.09	\$486.23	11.10%	0.56%
LEVEL IV GRAND TOTAL: <i>Combined Investment by Taxpayers & Participants</i>	\$211.24	\$54.88	\$4,379.05	100.00%	5.09%

The greatest latitude for local policy and program influence on staff development is associated with the allocation of specific categorical monies and with general fund monies targeted for staff development. Table II-1 displays the pattern of local expenditures when the value of future salary increases is eliminated from consideration. It summarizes costs using a program-oriented conception of investment: all current monetary costs plus the "opportunity cost" attached to reduced instructional time.

By these calculations, the public investment in staff development is less than 1.5 percent of classroom support costs—a modest investment by most corporate standards. In this configuration, participants' own volunteer time is the largest single contributor to the investment—not a taxpayer cost at all. Of "program operation" costs (Level I), leaders' time for planning and delivery of specific activities is the largest component, representing close to half (47%) of current monetary expenditures. The value of costs associated with learners' time made up the next largest expenditures: reallocated instructional time³ and substitutes together accounted for about one-third (31%) of total investment. (The actual cost of substitutes—about one-quarter of the current monetary outlay associated with staff development activities—is less problematic to many districts than the *availability* of qualified substitutes.)

Because salary increases are administered at the district level, however, and because districts have increasingly permitted teachers to accumulate salary units by participating in district-sponsored activities,⁴ this study also displays local staff development allocations when salary advances are taken into account. Table II-2 underscores an inescapable conclusion: *the largest single component of taxpayer cost, comprising more than 60 percent of the total, is the present value of future salary increases*—an investment more directly under the control of local school boards and teachers' organizations than under the control of the state. At issue here is not the "reallocation" of salary advances but the *conditions* that districts and teachers' organizations establish regarding movement on the salary schedule.

³A figure for lost instructional time was imputed only when pupil-free days or minimum days were devoted to staff development. For purposes of these estimates, this study did not consider the use of a substitute teacher a reallocation of instructional time.

⁴District-awarded units may contribute to salary advances within a district, but they are not transferable from district to district. In some instances, districts award salary credits simply as a way of offering teachers compensation for participation outside the salaried work day. Salary credits relieve the district of the immediate cash demands required by stipends, though credits cost the district more in the long run. Acknowledging that teachers are motivated to earn credits from some source in order to advance on the salary schedule, some districts have viewed district-sponsored credits as a way to ensure quality control and to forge a connection between credit-earning activity and district priorities. Of 30 district contracts reviewed, 1 placed specific limits on the ratio of district units to university units, 4 permitted both university and district units but did not specify a ratio, and 3 accepted only semester units earned at an institution of higher education. Other contracts made reference only to semester units or quarter units required to advance on the salary schedule, with no stated restrictions on institutional source.

Taxpayers' Support in Rural and Urban California

Cost data confirm widespread impressions that staff development is a vastly different experience in California's rural districts, where sheer geographic distance colors all decisions and constrains all opportunities, than in urban or suburban districts with close proximity to a diverse staff development marketplace (Table II-3).

Rural districts, with fewer discretionary program resources and severe travel limitations, spend less of their staff development dollar on formal district-sponsored activities and more of it to compensate teachers for accrued semester units. That is, staff development in rural areas falls more to the individual teacher or administrator than it does in urban and suburban districts. (Rural teachers and administrators spend less volunteer time in district-sponsored activities, but they are likely to incur higher out-of-pocket expenses.) Rural districts average about \$150 less per teacher or administrator in "current monetary expenditures" (Level I) associated with workshops, conferences, or other activities. When such activities are provided, they tend to require more than twice as much per participant in "miscellaneous" costs, including travel, and nearly three times as much to support the involvement of external presenters and consultants.

Table II-3 Patterns of Investment in Staff Development By Geographic Location

Investments	Cost per ADA		Cost per participant hour		Cost per participant		Percentage of staff development costs	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Substitutes	\$8.43	\$10.48	\$2.86	\$2.40	\$188.74	\$224.87	4.38%	4.82%
External Providers	\$6.25	\$3.64	\$2.12	\$0.83	\$139.92	\$78.12	3.25%	1.67%
Miscellaneous and Facilities	\$3.21	\$1.55	\$1.09	\$0.36	\$71.99	\$33.35	1.67%	0.71%
Supends	\$1.79	\$7.00	\$0.61	\$1.60	\$40.19	\$150.12	0.93%	3.21%
Leaders' Time for Planning & Delivery	\$17.33	\$22.47	\$5.89	\$5.14	\$388.14	\$481.92	9.02%	10.32%
LEVEL I SUBTOTAL: <i>Current Monetary Investment by Taxpayers</i>	\$37.01	\$45.15	\$12.58	\$10.32	\$828.99	\$968.38	19.26%	20.74%
Present Value of Future Salary Increases Resulting From Additional Semester Units	\$112.77	\$130.69	\$38.34	\$35.10	\$2,526.01	\$2,802.84	58.68%	60.02%
LEVEL II SUBTOTAL: <i>Current and Future Monetary Investment by Taxpayers</i>	\$149.78	\$175.84	\$50.92	\$45.42	\$3,355.00	\$3,771.22	77.94%	80.76%
Value of Reallocated Instructional Time	\$26.94	\$19.93	\$9.16	\$5.35	\$603.44	\$427.53	14.02%	9.16%
LEVEL III SUBTOTAL: <i>Total Investment by Taxpayers</i>	\$176.71	\$195.77	\$60.08	\$50.78	\$3,958.84	\$4,198.75	91.96%	89.91%
Investment by Participants	\$15.45	\$21.97	\$5.25	\$5.90	\$346.14	\$471.15	8.04%	10.09%
LEVEL IV TOTAL: <i>Combined Investment by Taxpayers and Participants</i>	\$192.17	\$217.74	\$65.33	\$56.68	\$4,304.58	\$4,669.91	100.00%	100.00%

Staff development in urban and suburban districts is more likely to be an “in-house” enterprise, with a higher percentage of the staff development dollar expended on district- and school-sponsored activities. Costs associated with the salaried time of in-district specialists and administrators are higher as a percentage of local expenditure, but the costs required for external consultants are correspondingly lower. Urban and suburban districts are almost four times as likely (per employee) to pay stipends for participation, but they pay a markedly lower share of their staff development dollar in salary increases attached to accrued semester units.

County Offices of Education Support

County offices make their main contribution by offering services that are too expensive for all but the state’s largest districts or that otherwise benefit from cross-district coordination. County dollars for staff development come from three sources:

- county general (“other”) funds, typically allocated under the heading of instructional services
- district or individual fees for service
- special grants or contracts

Of these three sources, only the general funds are not already accounted for elsewhere in this study’s cost estimates; it is estimated that approximately three percent of county general funds are devoted to staff development conducted as a service to districts and schools. (These estimates do not include county office staff development provided for teachers employed directly by the county for county-run educational programs). The bulk of county staff development resources is expended in leader time—the time taken by county staff to plan, arrange, conduct, or evaluate staff development activities. Staff development services of county offices are described in greater detail in Section III.

University Support

The state’s public and private universities contribute to the continuing education of teachers and administrators largely by providing course work as part of advanced degree programs, nondegree educational extension programs, and special institutes that award course credit. In the state’s public institutions, graduate course work taken as a part of advanced degree programs is subsidized at a rate estimated at \$185 per semester unit. Other

credit-awarding activities, such as summer institutes, tend to be self-supporting. Altogether, the public subsidy for more than 367,000 semester units acquired by California teachers and administrators in 1985-86 amounted to approximately \$70 million dollars.

On a much smaller scale, universities have forged collaborative arrangements with local school districts for purposes of staff development and school improvement. Although such programs consume less than three percent of all state and federal staff development monies (less than \$4 million), the largest and most enduring of them have drawn consistently favorable reviews from teachers and administrators alike. The main elements of university-based programs are discussed in greater detail in Section III.

State Staff Development Appropriations

More than \$156 million of state categorical funds were devoted to staff development in 1985-86. Of that amount, \$88 million was specifically intended for staff development in 1985-86; another \$68 million was expended on staff development in accordance with regulations governing state and federal categorical aid programs.

California's expenditures for special programs can be categorized as investments in various levels of the K-12 system and the institutions that support that system: teacher, school, district, county or regional service providers, and university. Figure II-3 displays the proportion of the state appropriation invested in each of six levels. Table II-4 summarizes the dollar allocations for each category of program. (Specific program allocations are listed in Appendix C, Table C-1.)

Figure II-3

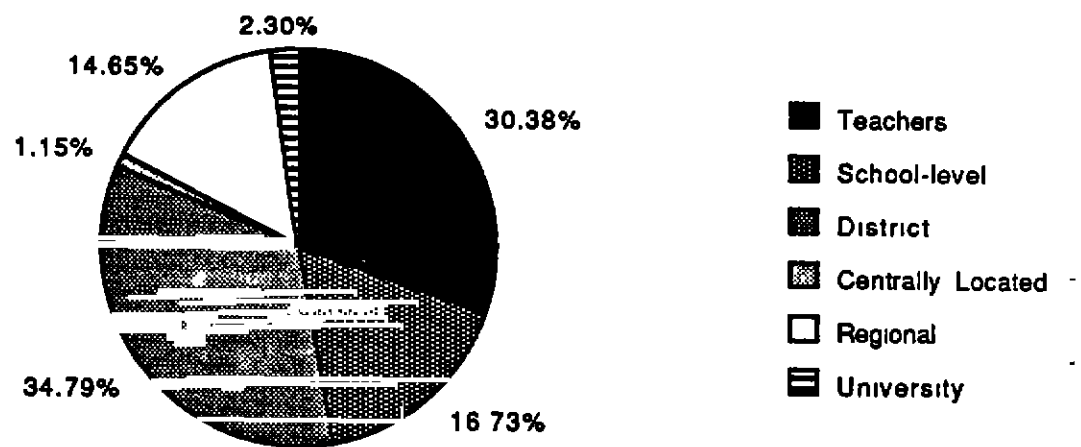
**ALLOCATION OF STATE CATEGORICAL
FUNDS FOR K-12 STAFF DEVELOPMENT**

Table II-4 Patterns of Categorical Program Allocation for Staff Development

Based on program appropriations, 1985-86

Allocations	Dollar investment Total (in thousands)	% of state staff developmt. appropriation	% of state categorical & staff developmt.	% all state and federal dollars
Total (in thousands)		\$88.02*	\$122.12*	\$155.60*
<i>Teachers</i>	\$47,500	53.97%	38.90%	30.53%
<i>School</i>	\$26,150	4.15%	21.41%	16.81%
<i>District</i>				
Targeted staff devt.	\$15,400	17.50%		
State categorical aid	\$11,600		22.11%	
Federal categorical aid	\$27,400			34.96%
<i>Regional</i>				
State funded	\$15,800	17.95%	12.94%	
Federally funded	\$7,100			14.72%
<i>Centrally-located service</i>	\$1,800	2.04%	1.47%	1.16%
<i>University</i>	\$3,600	4.09%	2.95%	2.31%

* Derived from columns 1.2. and 3 in Appendix Table C-2.

Investment Directly in Teachers. Programs that place resources directly in the hands of teachers accounted for approximately 54 percent of state program appropriations appropriated for staff development during 1985-86 and 30 percent of all state and federal program support for staff development. Teachers' individual opportunities and obligations for professional development are supported under three titles, all launched by SB 813. The Mentor Teacher Program and the Classroom Teacher Instructional Improvement Program together accounted for more than half of the state's program allocations, a substantial investment in teachers. The two programs reflect a particular orientation toward teachers and their professional development and career commitment. The third program, the Professional Growth Requirement, was unfunded. It achieves its effect by regulating the conditions under which teachers receive and renew their teaching credentials.

The Mentor Teacher Program was designed to recognize exemplary classroom teachers and make their expertise accessible to both beginning teachers and experienced colleagues. The program's nominally high per-teacher cost (\$6,000 per mentor) is reduced

to the degree that mentors in fact work with other teachers. In its current form, only one-third of the initial investment accrues to the district in the form of discretionary resources that can be devoted to staff development activities; this is the \$2,000 per mentor in "other funds" that may be expended on release time, materials, travel, and program administration. The remaining \$4,000 is directly paid to mentors in the form of a stipend.

By asking mentors to calculate the worth of their \$4,000 stipend on a per-hour basis (as a way of establishing the amount of "extra work" required to earn "extra pay"), districts bend the spirit of the law, but they recover the dollars in the form of "leader time" in staff development. (Such provisions also make the mentorship more acceptable to the larger body of teachers, who thereby see mentors "earning their keep.") The cost per teacher drops to the extent that mentors directly assist beginning teachers and other colleagues. For example, a mentor who assists a beginning teacher two hours per week for an entire academic year may devote the salaried time equivalent of nearly \$2,000, or half the value of the mentor stipend. A mentor who spends eight hours to develop and lead a two-hour workshop for 30 teachers reduces the hourly public cost of mentor support by a factor of four.

The Classroom Teacher Instructional Improvement Program (CTIIP) was intended to promote and reward teachers' own initiative in the improvement of classroom instruction by awarding minigrants to individual teachers on a competitive basis. The funding of \$17 million stretched to appropriated 8,500 teachers, or between three and four percent of the state's teacher population. On a per-teacher basis, each CTIIP grant of \$2,000 is half again as much as the average dollar value of staff development services provided through categorical and district general funds (excluding salary advances).

By bringing discretionary decision making closer to the teacher, policy makers wagered that teachers' motivations to improve would be heightened and that the content of professional development activity would be more directly linked to teachers' instructional assignments. However, the demonstrated value of the Mentor Teacher Program and the Classroom Teacher Instructional Improvement Program has never been assessed in any systematic fashion. Certainly district administrators are enthusiastic about the evolution of the mentor program and were dismayed when CTIIP funds were eliminated; more than four-fifths of district administrators surveyed by mail said that CTIIP cuts would have an unfavorable effect on staff development opportunities.

Both the minigrant strategy (CTIIP) and the mentor program redistribute staff development resources to teachers, but they concentrate those resources in the hands of a few teachers who demonstrate extraordinary classroom competence or who display the initiative necessary to secure a grant (less than 10 percent of the teacher population in a one-year period). In this regard, the strategy differs from one that would distribute resources more widely among teachers, with each teacher receiving a smaller share. Thus, the test of

the current strategy is its ability to gain leverage on the thinking and performance of a pool of teachers that extends well beyond the direct recipients of the awards.

Investments in School-Based Staff Development. Support that flows directly to schools for school-based staff development consisted, during this period, of AB 551 (School Site Staff Development) and a share, estimated at about 10 percent, of the state's School Improvement Program (SIP) monies. Together, these two sources account for slightly less than one-fifth of all state and federal appropriations. Schools also exert substantial influence over expenditures associated with certain categorical programs that are formally administered at the district level, such as the federally sponsored Education Consolidation and Improvement Act (ECIA), Chapter 1.

The guidelines governing AB 551 and the School Improvement Program reflect a 25-year history of case study research on the dynamics of school improvement. In exchange for substantial local latitude in determining improvement priorities and strategies, schools are required to subscribe to a planning and evaluation process that involves all major constituencies (including parents) and that calls for careful diagnosis of needs and assessment of progress. Although the programs have had mixed success,⁵ the successful cases tend to confirm the wisdom of the basic program approach.

Access to discretionary staff development resources at the school level has been predominantly the legacy of categorical program funding. Schools that qualify for school improvement funds or for other categorical funds administered by the district are demonstrably more "staff development enriched" than other schools. It appears to be the exception rather than the rule for districts to allocate discretionary staff development funds uniformly to all schools out of the district's general fund. Even school-specific reserves derived from categorical funds are often controlled and administered at the district level.

Investments in District-Level Staff Development. Approximately one-fifth of state staff development appropriations and more than one-third of all state and federal staff development monies are placed at the disposal of districts.⁶ The funding pattern reflects a history of special emphasis initiatives in selected curriculum areas (especially math and science) or for special target populations (bilingual students, gifted and talented, handicapped). Of these district funds devoted to staff development, four-fifths are governed by categorical program regulations, and close to half of those categorical programs are controlled by federal regulations.

⁵ A three-year evaluation of the School Improvement Program completed by Berman, Weiler Associates in 1983 concludes that the program produced significant gains in schools where the process was taken seriously. Successful implementation was more often found in elementary than in secondary schools and in schools with principals who were knowledgeable about and involved in the program. (See Berman and Gjetten 1984).

⁶ Estimates of the percentage of state categorical program budgets devoted to staff development were made on the basis of available local data combined with consultation with district and state administrators.

District-level investment reflects a mix of categorical funding that is closely governed by regulations (such as Chapter 1) and more general school improvement resources that may or may not be devoted to staff development, in accordance with the priorities established by a district administration or by the faculties of eligible schools.⁷ To the extent that districts gain policy and program control over a larger array of staff development activities, they do so in part by retaining centralized authority over the general direction and operations of programs targeted for other levels. Of the \$54.4 million in state and federal categorical funds administered by districts and expended on staff development:

- Twenty-eight percent (slightly over \$15 million) is intended exclusively for staff development. Nearly all of those funds are devoted to implementation support for the Mentor Teacher Program.
- Fifty percent (over \$27 million) is restricted by law to benefit certain categories of student (and the teachers who teach them). Staff development is permitted insofar as it contributes demonstrably to the quality of instruction or other services received by the specified student population.
- Twenty-one percent (\$11.6 million) is targeted to improvements in specific topical areas such as computer technology, math, or science.

Investment in Regional Staff Development. A strategy of regional service delivery consumed less than 20 percent of the state appropriation in 1985-86. Regional staff development services were funded at a level of \$23 million, spread over seven separate programs. Three of the seven programs were supported entirely by federal dollars, but the decision to apply those dollars in a program of regional service rested with the state. The remaining four programs accounted for nearly \$16 million, or 18 percent of state allocations.

The state has relied most heavily on county offices of education as the administrative home of regional services. During the one-year period of this study, 26 of the state's 58 counties administered one or more of the funded regional programs. Regional service programs have been assigned to counties on the basis of geographical spread, proximity to campuses of the California State University system, expedience, and (more recently) the quality of competitive proposals. Of seven regional programs located mainly in county offices of education, two have garnered the bulk of the funding and the lion's share of educators' attention. The histories of the Teacher Education and Computer

⁷ Districts in California, like those elsewhere, choose the degree to which they will invest general fund monies in staff development or rely almost exclusively on categorical aid funds. Viewed from the perspective of state program appropriations, however, investment in district-level staff development is predominantly an investment in special programs accompanied by specific legislative intent and program-specific guidelines. Such a funding mode constrains local decision making and may reflect (across programs) quite different and even competing improvement strategies.

Centers (TECCs) and the California School Leadership Academy (CSLA) reflect two distinct philosophies of investment, governance, and service delivery.⁸

The TECCs began with the single mission of speeding teachers' familiarity and facility with computers and other technology. But with the passage of SB 813 and the development of the Model Curriculum Standards, TECCs evolved quickly into all-purpose regional service centers. Program priorities (writ large) were set by the state; specific program content and strategy were decided locally. In 1985-86, a TECC budget of \$10.6 million supported 17 centers that collectively offered more than 3,300 training activities, reaching as many as 80,000 teachers and 15,000 administrators. An additional budget of approximately \$2 million was reserved for Curriculum Implementation Centers (\$1.7 million) and for other special projects (Software Clearinghouse, Math/Science Teacher Retraining).

Cost assessments of the TECC model are made difficult by the diversity of TECC offerings and by the gradual shift from one-time workshops to more intensive workshop series. The overall figure of \$417 per participant (derived from dividing the total budget by the total number of participants served) would represent a modest expenditure if stretched over a 30-hour workshop series for which substantial participant time and leader time were required. In 1985-86, two-thirds of all participant hours were spent in activities described as "multi-session"; the median length of TECC training activities in 1985-86 was 14 participant hours, up 40 percent from the previous year.

The California School Leadership Academy's 11 Administrator Training Centers deliver an established curriculum to administrators who commit 15 days each year for three years as a condition of participating in the program. Curriculum development is centralized at the academy's Institute of Training Development and Research, the system's "hub" located in the San Mateo County Office of Education. The CSLA model is premised on the availability of well established curriculum content that reflects a core of essential ideas and methods and that lends itself well to structured skill training. In the view of its designers, the academy places greatest premium on uniform availability of a core curriculum; a modicum of local flexibility is introduced by reserving a 20 percent share of regional center budgets for materials and activities that are specifically responsive to local needs. From a policy perspective, one of the main issues associated with the CSLA model is that of the "developmental capital"⁹ required to develop content and methods of high quality.

⁸ Although funding for the 17 TECCs was eliminated in July 1987, the TECC model represents one common approach to regionalized service delivery. For that reason, costs for both models are summarized here, and program elements are described at greater length in Section IV.

⁹ Questions of developmental capital first arose when researchers considered the question, "How does one develop a program of the calibre of a Cal Writing Project?" The California School Leadership Academy represents a deliberate attempt to give special attention (and special funding) to the early stages of a complex project to quicken the pace and control the quality of program development. The Cal Writing Project adopted a different strategy, developing on a small scale for four years before attempting regional

In the past year, the academy has provided 15 days of training to 1,650 school administrators and has conducted a range of associated needs assessment and follow-up activities with districts in each of the service areas. If one were to assess cost-effectiveness based only on the training, the academy would be found to invest slightly more than \$2,500 in each of the participating administrators, for a relatively modest per-hour cost of \$24.50. (This is a figure that is somewhat greater than the cost of local district staff development for administrators; the taxpayer investment in district-level activities is approximately \$18 per participant hour—about three-fourths of the cost of CSLA training. However, most districts have concentrated their staff development resources on teachers and have developed relatively few systematic training and support opportunities for administrators.)

Investment in Centrally-Located Special Services. The Software Clearinghouse and the Curriculum Implementation Centers are examples of a staff development service funded in a single location, with service provided statewide. The success of such a strategy rests heavily on one of two conditions. The Software Clearinghouse exemplifies the first condition, in which a centralized service takes on a staff development task that can serve large numbers of teachers efficiently and effectively without requiring face-to-face contact. In the case of the Software Clearinghouse, up-to-date materials and an efficient distribution system are the key to teachers' benefit. Success depends crucially on the ability of individuals or other regional agencies to make intelligent use of materials distributed by mail, or to locate help nearby.

The Curriculum Implementation Centers and the Cal Literature Project (listed under university-based programs) exemplify the second condition, in which success depends crucially on how well local schools and districts are organized to extend to all teachers the benefit of in-depth experiences offered to a few.

Investment in University-Based Programs. Opportunities for concentrated study of subject matter, suitably combined with teaching methods, are at the heart of the state's funding of categorical university-based programs. In a published summary of university-school programs in the University of California system, 19 programs were explicitly described as staff development. Nine of the 19 projects receive state funding, with the largest amounts going to support the highly regarded Cal Writing Project and other projects based wholly or partly on that model (Cal Math, Humanities, and Literature projects, and the EQUALS [math] Project). Support from federal agencies and private foundations adds to the system's capacity to provide staff development to K-12 educators.

In a similar summary prepared by the California State University system, 64 collaborative projects were described as "professional preparation and development" with an emphasis on inservice teacher education. Such projects ranged from special courses

service delivery. Both programs, however, benefited from investment in the development of content, strategies, and materials in their early stages.

designed by individual professors to larger scale, specially funded projects such as the intersegmental New Teacher Retention projects based on the San Diego and Hayward campuses. Staff development services spanned all major academic areas, plus activity in the areas of technology, multicultural education, and bilingual education. Under an intersegmental agreement, approximately half of the CSU campuses also serve as host sites for regional Cal Writing and Math Project activity.

The estimate of investment represented here is derived from those projects known to be receiving special state funds and is based only on the share of funding contributed directly to the university by the state. (Other California taxpayer support for such programs, such as that provided by district fees, is already included in the district and school estimates.) Estimated in this fashion, *university-based programs accounted for less than five percent of the state staff development appropriation and less than three percent of all state and federal staff development resources.*

State Appropriations and State Policy Orientation Toward Staff Development

From a state perspective, investing in staff development for teachers, administrators, instructional aides, and others will bolster progress toward improved student learning by attending to each of several intermediate goals, including:

- strengthening the current curriculum and teaching approaches
- implementing broad new curriculum and instruction reforms and modifying current programs to serve new pupil populations
- organizing effective induction support and supervision of new teachers
- fostering the continued development of a professionalized work force

The current inventory of program titles reflects attention to each of the purposes, but no comprehensive or consistent policy orientation toward the goals (either individually or collectively) or toward the institutions best equipped to pursue them.

Judging by the pattern of funding, individual teachers are considered a major agent of policy action. In 1985-86, fewer than 10 percent of the state's teachers received a 50 percent share of the state's targeted staff development resources under the provisions of the Mentor Teacher Program and the Classroom Teacher Instructional Improvement Program.

At the school level, the current pattern reflects a deliberate decision to apply lessons learned from school improvement experience of the past. Both the School Improvement Program and the School Site Staff Development Program (AB 551) feature planning and evaluation processes intended to forge the tightest possible connections between local needs and program expenditures. In many districts, especially those with large infusions of categorical monies, the logic of these general school improvement and professional development programs may compete with the regulations governing other programs.

At the district level, staff development policy is dominated by two decades of growth in state and federal categorical aid programs. Consolidated application procedures and comprehensive Program Quality Review procedures are major steps toward relieving programmatic and fiscal schizophrenia at the local level. Nonetheless, planning for staff development activities still is more often than not tied to provisions of single programs. When one scans the sources of funds for staff development programs, one is hard-pressed to detect a set of underlying beliefs about how districts help teachers and administrators improve.

Above the district level, the policy picture is confused by apparent uncertainty about the appropriate roles of county offices of education versus the public university systems as providers of continuing education for California's teachers and administrators. County education offices have served as the administrative home for the largest of the regional service programs and—through the Teacher Education and Computer Centers—have also assumed responsibility for administering two of the state's grant programs to districts and schools (AB 551 and AB 803). As regional service programs have responded to pressures to expand their participation in curriculum reform, they have confronted inevitable limitations in the curriculum knowledge, skill, and experience of a small staff. In 1985-86, even the largest of the TECCs employed fewer than 15 full-time staff; as a group the size of a single elementary school faculty, they were faced with the challenge of providing useful service to the teachers and administrators in approximately 100 districts.

The twin problems of size (in population or geography) and diverse service expectations plague county-based regional service programs pressed to demonstrate "cost-effectiveness." At the same time, a regionally organized institution with substantial curriculum expertise and a long-standing institutional commitment to the preparation of teachers—the California State University system—remains relatively invisible in the state's recent program developments.

SUMMARY OF TAXPAYER INVESTMENT IN STAFF DEVELOPMENT

Examination of taxpayers' investment in staff development for California teachers and administrators yields three major conclusions:

1 Staff development programs and services for teachers and administrators consume approximately 1.8 percent of California's total education funding, a total of \$368 million during a one-year period.

- Taxpayers' contribution to staff development programs and services consists of five parts: (1) approximately \$88 million in funds appropriated specifically for staff development, (2) an estimated \$34 million for staff development linked to other state categorical aid programs, (3) an estimated \$34 million for staff development associated with federal categorical aid programs administered by the state, (4) approximately \$70 million in the costs of public university graduate instruction not covered by student fees, and (5) approximately \$140 million in allocations from local district and county general fund budgets.
- The average annual "direct" expenditure for local staff development activities (excluding university course work) is approximately \$1,360 per teacher and \$1,800 per administrator. (When the taxpayer subsidy for graduate-level university instruction is included, the total average investment per certificated employee is slightly over \$1,700). Of the total investment in teachers, 90 percent (\$1,229) is controlled at the district level. Of that amount, \$912 or 70 percent of the total consists of monetary outlay in support of programs. The remaining \$317 is a figure calculated to represent reallocated instructional time.
- Public dollars spent directly on staff development activities at the district level (\$912 per teacher) are divided almost evenly between those associated directly with "learners" (substitutes, stipends, materials) and those associated with staff development leaders, both internal and external. Thus, an average of \$430 per teacher goes to support teachers' participation by paying for substitutes, stipends, facilities, materials, and travel. The salaries of district specialists who plan and lead staff development services account for about \$400 per teacher. External consultants and presenters account for an additional \$82 per teacher.
- Governmental spending on staff development is heavily supplemented by participants' private contributions of time and money. For every dollar that districts spend on staff development activities, participants contribute another 60 cents in uncompensated time.

- The largest share of staff development programs and services is managed directly by districts and schools through the local administration of state categorical programs, policies governing release time of teachers and other conditions of professional development, and collectively bargained agreements regarding teacher salary advances.
- The current public investment in teachers' and administrators' professional development appears to be a modest one by corporate standards. While comprehensive and complete data are not available on corporate staff development, examples provided informally suggest that it is not uncommon for corporations to invest more than \$1,500-\$2,000 per year on staff with professional or managerial responsibilities.

2. The future obligation for salary advances that teachers accrue as a result of advanced university courses or salary credits awarded by the district are the taxpayers' largest investment in staff development.

- The bulk of taxpayer investment in teachers' professional development—nearly \$600 million during a one-year period—is in the form of future salary obligations made to teachers who accrue credits by enrolling in university course work or by attending district-sponsored activities outside the salaried workday. When future salary increments are added to current monetary and nonmonetary costs, the total taxpayer investment exceeds four percent of total education funding and approaches \$1 billion per year.
- Linking continuing education to salary advances by the use of uniform salary schedules is a widespread feature of American school governance. In California, the present value to a teacher of future salary increments resulting from an additional semester unit is approximately \$1,400. Local policy makers exert control over this expenditure insofar as they establish criteria and procedures to regulate the award of credits that teachers apply toward salary increases.

3. The state appropriates staff development funds for teachers, schools, districts, counties, and universities, but it reveals no comprehensive or consistent policy orientation toward staff development or toward the institutions that provide it.

- State-supported staff development is an activity in the service of other educational purposes. In principle, staff development provides the knowledge and skills essential for curricular or instructional reforms. It enhances teachers' success with the state's diverse student population. It enriches the supply of rewards and incentives that influence teachers' long-term commitment to teaching. It enables schools to tackle more demanding school improvement goals. That is, it serves multiple goals. In practice, state programs are now devoted to each of these goals.

- Despite the multiplicity of staff development goals evident in the inventory of state-funded programs, there appears to be no clear view of the relationship between any one purpose and the institution(s) best equipped to pursue it. The proportion of funds allocated to teachers, schools, districts, counties or regional agencies, and universities reflects a combination of deliberate strategy and historical accident.
- The growth in state-supported staff development has been accompanied by a proliferation of new agencies, outside the mainstream institutions. The rise of new staff development providers (mostly regional services housed in county offices) contrasts with the relative lack of change in basic structures for organizing teachers' or administrators' work and their preparation for that work.
- The policy picture is complicated by the fact that state-supported staff development is an activity in the service of other educational purposes. Presumably, it provides the knowledge and skill essential for curricular or instructional reforms. It enhances teachers' success with the state's diverse student population. It enriches the supply of rewards and incentives that influence teachers' long-term commitment to teaching. It enables schools to tackle more demanding school improvement goals.

III. The Organization and Delivery of Staff Development

This section summarizes the professional development opportunities made available to teachers or administrators by the universities, districts, schools, and other professional organizations that prepare them, employ them, and otherwise affect their daily work and careers. The discussion relies on data from 30 case study districts, mail and telephone surveys of teachers, and mail surveys of school site, district, and county administrators.

DISTRICTS AND SCHOOLS AS PROVIDERS OF STAFF DEVELOPMENT

Districts and schools are the major providers of staff development. In any one year, a teacher is two to three times more likely to participate in a district-sponsored staff development program than in college or university course work. Over the last two decades, beginning with the surge of federal categorical funding in the mid 1960s, proliferation of special programs and the press of reform have led many districts to centralize both curriculum development and staff development. Districts have become steadily more concerned about and invested in staff development goals, and they have become steadily more sophisticated in the design and delivery of staff development activity. Staff development has become a vehicle of district curriculum policy.

In California, as elsewhere, staff development planning and activity are largely centralized at the district level. Of the total number of participant hours in 30 districts, 64 percent were accounted for by district-sponsored activities involving teachers from more than one school. The remaining time was spent in school site activities, ranging from short, one-time presentations to long-term, intensive improvement projects.

Research has celebrated the importance of the school as the basic unit of staff development and school improvement. This study may underestimate teachers' participation in school site staff development in three ways. First, data collection methods emphasized the description of formal staff development activities. This may lead to an underestimation of the extent to which professional development occurs as teachers work together on a day-to-day basis. Second, school-level interviews were conducted with the principal or a person assigned by the principal. In large schools, or schools with a wide array of categorically funded projects, knowledge of staff development activity may be more widely distributed among staff who have responsibility for separate programs. Finally, the sample of schools is relatively small and, though randomly selected, was not designed to be representative of the district's schools. There is no way of detecting systematic bias in the school sample with respect to the matters that most directly concern this study: commitment to and participation in staff development.

Nonetheless, staff development is largely "district business." Funds and decision making are more centralized than not, and most activities involve teachers or administrators from more than one site.

Administration and Leadership of Staff Development.

"Leader time" is one of the highest cost elements of staff development; in the 30 districts studied in depth, time spent by administrators, staff developers, and teachers in planning, delivering, and evaluating staff development accounts for nearly half of the current monetary costs of staff development—more than twice the cost of substitutes (a major component of "learner time"). District administrators holding part-time responsibilities for staff development account for the largest share of leader time (Table III-1), though the precise allocation of time to "program" and to "administration" is uncertain.

Table III-1 Administration and Leadership of Staff Development

	Participant hours involving each category of leader	Cost per leader hour
Classroom teachers	10%	\$27.50
Specialist teachers	60%	\$27.50
District administrators	92%	\$35.00
External consultants	13%	\$38.50

The administration and leadership of staff development reflect the trend toward centralization. Responsibility for district staff development is typically aligned with two major district functions: (1) curriculum and instruction and (2) categorical program administration. More than 80 percent of participant hours in district staff development were planned and delivered by staff responsible for these two areas.

The pattern displayed by the 30 case-study districts is confirmed by administrators in 265 districts who estimated their use of each of 15 categories of staff development leaders (Table III-2). Their responses display a systematic preference for internal

resources, especially district staff developers and mentors, and for individual consultants who work on district-determined priorities.

Table III-2 Who Leads District Staff Development?

Report of district superintendents surveyed by mail
(N=265)

	Never or rarely	Up to 25% of activities	Up to 50% of activities	More than 50% of activities
Activities were led by:				
Outside presenters who are private consultants or trainers	17.0	53.4	19.0	10.1
University faculty, part of special projects (e.g., California Writing or Math)	39.1	52.6	6.3	1.6
Other university professors	82.1	16.2	0.9	0.4
State Department of Education consultants	74.7	24.9	--	--
County office staff (excluding TECC)	25.9	54.3	15.0	4.5
TECC trainers	31.8	49.4	14.2	4.2
District specialists or administrators from another district	47.5	41.9	6.8	3.4
Classroom teachers from other districts	55.8	39.1	4.3	0.4
Your own district staff developers (trainers)	19.6	38.8	22.1	19.2
District curriculum specialists	45.4	33.0	14.5	6.6
Mentor teachers	15.2	44.0	24.4	16.0
Other resource teachers or teachers on special assignment	54.5	36.6	7.1	1.3
Site administrators	27.3	58.4	9.8	4.1
Classroom teachers (other than mentors or resource teachers)	30.5	57.9	10.3	0.9
Publishers' representatives	53.2	43.0	3.4	0.0

The Prominence of District Specialists. Districts rely heavily on in-house staff to plan and conduct staff development. Full-time or part-time central office administrators and staff development specialists account for the design and delivery of 92 percent of all participant hours at the district level.

In mid-size to large districts, staff development administration and leadership follow a common pattern. Relatively few district administrators oversee staff development offerings, supported by staff developers who are often teachers on leave from the

classroom. These teacher-staff developers may hold permanent or quasi-permanent positions in the central office, but they remain on the teachers' salary schedule and are considered a part of the teachers' bargaining unit. For purposes of this description, they are considered part of a central office staff devoted to planning for and delivering staff development services to teachers and administrators. Thus, they are distinguished from mentors or other full-time classroom teachers who may occasionally lead staff development activities.

District specialists who devote their time to staff development are characteristically knowledgeable, thoughtful, skillful individuals. They often have a reputation for being talented presenters, and they prepare carefully for the activities they lead. They take pride in remaining current with new developments in research and practice and tend to have well-honed instructional and interpersonal skills. The disparity between a research-based image of "good staff development" and the arrangements the district is able to establish with limited resources is a matter of concern to them.

Districts are necessarily confronted with dilemmas of how best to use district staff development specialists. As a matter of sheer numbers, specialists cannot hope to meet the needs and satisfy the interests of faculty and staff who outnumber them at least 80 to 1. Some districts have organized a version of the "trainer of trainers" model intended to build both the skills and commitments of school site teachers and administrators. Some have placed a greater share of staff development funds or other resources at the school site. Some have assigned district specialists a "client group" of specific schools. Still, the greatest proportion of specialists' time is spent preparing for or leading direct service activities—providing instruction or consultation to individuals or groups.

District specialists make their decisions about the content and form of activities based on some combination of teachers' stated interests, their own knowledge and enthusiasms, the marketplace of presenters and materials, and the district's priorities. Among these influences, teachers' voices have the least influence.

The Use of External Consultants. Virtually every district employs consultants and external presenters for some staff development activities. Nevertheless, the total cost devoted to external consultants is not large. District administrators report that the cost of an individual presenter may range from as little as \$100 to more than \$1,000 for time and travel, but tends to average about \$250. External presenters play a role in 13 percent of participant hours, at a cost of less than one-tenth of the average district's current monetary expenditures and less than five percent of all staff development costs.

The significance of external consultants does not reside in the fiscal demands they pose, but in the logic and strategy they represent. Ten years ago, a large-scale study of school change and staff development concluded that external consultants were frequently overused and badly used (McLaughlin and Marsh 1979). Unless a consultant cooperated

closely with a district or school over a long time, coming to know the local circumstances and people well, the "return on investment" was marginal. Even worse, writes Rosabeth Kanter (1983), an institutional habit of relying on "purchased talent" may contribute to a "culture of inferiority" as insiders come to believe that none of them is good enough to do the job. Under such conditions, she argues, performance tends toward the mediocre and commitment weakens.

Among the 30 case-study districts, district administrators had adopted a carefully strategic approach toward work with consultants, giving preference to those who could establish a long-term relationship with the district. In an effort at quality control, some administrators made it a policy to invest only in consultants whom they had observed personally. Some conducted "briefing sessions" to acquaint a consultant with key goals and relevant history. Others used consultants as part of a "trainer of trainers" strategy designed to enlarge the pool of capable "insiders." However, this study also found many patterns of the past: an inclination to go "outside" first for presenters and a reliance on word of mouth endorsements as sufficient guarantee of a consultant's quality.

Teachers as Staff Development Leaders. Teachers expect to learn most from fellow teachers; among the most common questions asked of presenters is, "Have you ever taught?" On the whole, however, teachers participate in staff development as learners, not leaders. Among the 30 case-study districts, teachers acted as planners or presenters for 10 percent of all participant hours; however, because classroom teachers rarely had sole leadership responsibility, they accounted for less than 10 percent of the total leader time devoted to planning, delivering, and evaluating staff development activities.

Asked about their preferences, nearly four-fifths of teachers who completed the mail survey agreed that teachers *should* provide staff development. Less than one-fifth said they *now* work in schools where teachers frequently lead staff development activities. About one-quarter of teachers said they had had an opportunity to lead at least one activity during the one-year period, with opportunities markedly less visible to teachers in large districts. The path to leadership varied. Although many teachers volunteered (44%), others were asked by peers, the principal, or someone else (a district specialist, for example).

The Mentor Teacher Program has evolved as a special vehicle for promoting teachers' leadership in staff development. In the early stages of the program, mentor activities tended to be idiosyncratic, marginally visible to other teachers, and peripheral to the goals or needs of the school or district. Mentors devoted more of their time to preparing curriculum than to cultivating rigorous, supportive "mentoring" relationships among teachers (Bird 1985). As the program has matured, mentors have gained acceptance by spending more and more of their time working directly with colleagues and developing staff development activities designed to reach a larger audience of teachers. A combination of personal inclination and institutional priorities now decides a mentor's task.

Over three years, the mentor role has evolved toward a staff development role and has demonstrably increased teachers' opportunities to learn from and with one another. The inservice workshop is the mentor activity most frequently cited by district administrators in describing how mentors spend their time. Two-thirds of the teachers who have been mentors say they have led staff development activities since June 1986; less than one-fifth of regular classroom teachers have done so.

Contributions by Counties, Universities, and Other Agencies to District Staff Development. District and school resources are sometimes supplemented by agencies outside the district, primarily county offices and other nearby public institutions. The contribution of staff time or facilities made by any one agency is relatively small, but the combined "supplement" affects more than one-third of participant hours at the district level and nearly one-fifth at the school level. These figures apply only to services for which a district does not pay.

Districts also support one another, expanding the total pool of staff development resources. Nearly one-third of the 265 districts responding to the district survey say they are part of a staff development consortium; approximately four-fifths have given or received staff development services across district lines, sometimes on an "in-kind" basis and sometimes for a fee.

Design and Content of Local Staff Development

The content and form of California staff development bear the unmistakable imprint of the recent reform era, initiated in California under SB 813. Particularly in the larger districts, staff development planning takes deliberate account of the three-year assessment, planning, and implementation cycle associated with the Model Curriculum Standards. District specialists and administrators acquainted with research on school improvement and staff development have devoted an increasing share of staff development resources to long-term, intensive cooperation with school-based teams. Nonetheless, many old patterns survive.

Constraints of the Staff Development Marketplace. Staff development opportunities are determined in large part by the available marketplace of presenters and programs. Few districts are of sufficient size to afford the resources necessary to create staff development experiences for all subject areas and grade levels that combine sensitivity to current instructional assignments, intellectual depth, and time for adapting new ideas to established curricula. The challenge is made more complex by the range of experience and sophistication in the teaching work force and the range of community circumstances that teachers confront.

Left to their own limited resources, districts make a sensible accommodation: most devote a large measure of staff development time and funding to packaged programs or to presenters known to earn high satisfaction ratings from large numbers of teachers. Most of the packaged programs have emphasized classroom management, general instructional technique, or strategies for classroom organization (such as cooperative learning) independent of subject area. Such programs occupy a declining proportion of district staff development offerings; nonetheless, it remains common to find districts offering 30-hour series titled "Clinical Teaching," "Elements of Instruction," "Classroom Management," "TESA (Teacher Expectations, Student Achievement)," and "Cooperative Learning."

As district administrators scan the "audience" of teachers—diverse in background, experience, teaching situation, and individual interests or inclinations—they are understandably disposed toward a district inventory of staff development services that more closely resembles a catalogue than it does a reasoned set of program and policy choices. A few districts (6 in a sample of 30) have restricted expenditures to a small number of staff development priorities and methods; others have compromised by retaining a lengthy menu of short-term workshops to attract the interest of individuals while reserving some resources for special pilot projects with entire schools or for long-term work with groups of teachers. Overall, however, the market-driven and menu-oriented character of much staff development leaves the field vulnerable to content that is shallow, gimmicky, or (in some disciplines) simply wrong.

A review of staff development offerings in most districts reveals an orientation slanted more toward training rather than study, technical skills rather than substantive understanding and judgment. The training industry, it appears, has heavily influenced managers' (and even teachers') conception of professional development.

Intensity of Staff Development. Common sense experience and research both confirm this proposition: frequent, intensive staff development directly related to the intellectual and social demands of teaching will yield more benefit than infrequent, disjointed events. Three measures can be used to gauge the "intensity" of staff development and its potential tie to teachers' instructional assignments and current school priorities.

The first measure of intensity is the "long-term" versus "short-term" nature of staff development, measured both as the number of participant hours and as delivery in single or multiple sessions. Prior studies suggest that longer, more intensive staff development is more likely to have effect than short, isolated activities. Although "one-shot" events remain part of the staff development menu, especially at the school site, nearly half of the school activities and more than half of all district activities can be measured in *days, not hours*. Of all participant hours, only about 10 percent were spent in one-time events of six hours or less. The majority (76%) were spent in staff development series requiring 12 or more hours. Although this study found relatively few examples of truly long-term, incremental

staff development, far fewer instances of very short "one-shot" activities were found than had been anticipated.

The second measure of intensity is the availability of classroom and school follow-up to initial training activities, or, alternatively, the availability of time for joint planning and problem solving among teachers. A widely accepted premise in the research literature is that course work, skill training, or other "away from the classroom" professional development has only marginal influence when teachers lack opportunity to examine the fit of new ideas with current curriculum, instruction, or student needs.¹

As described by district and school staff developers, nearly two out of every three participant hours are associated with some form of follow-up. Follow-up was more likely to be optional than required. In only about one-quarter of the district activities and less than one-fifth of school activities were teachers required to follow-up as a condition of participation. Judging by other related research, the prospects that follow-up will actually occur, and actually have impact, are much greater when teachers make an explicit commitment to participate. Optional follow-up tends to mean no follow-up.

About two-thirds of surveyed teachers reported follow-up as having been available for some or all of the activities they had participated in during a one-year period, but rarely has the follow-up involved teachers observing one another. That is, when teachers describe "follow-up," they employ a definition considerably broader than the classroom observation or consultation envisioned by most staff developers. The most common form of follow-up exploited by teachers was an opportunity to plan with other teachers, or simply to discuss what was learned. Teachers wrote:

Follow-up is very important. Nothing is more frustrating than to get great new ideas and not be able to use the ideas because there are no funds and no support.

The single most important priority for me is receiving time to plan and implement the many worthwhile ideas offered to us by our school and district. Without this planning and implementing, ideas are simply not used.

¹ This argument gained prominence after Bruce Joyce and Beverly Showers published a critique of skill-based staff development, estimating a "transfer rate" of less than 20 percent in the absence of classroom-based "coaching" (Joyce and Showers 1981). The most sophisticated of the skill training studies trace the effects of training into classroom practice. From these studies, one learns (1) the more complex the ideas and methods, the greater the requirement for incremental, long-term support (Joyce and Showers 1981); (2) teachers' acceptance of an idea, and their commitment to its use in the classroom, are more powerful than their knowledge or skill in predicting actual classroom use (Mohlman, Coladarci, and Gage 1981); (3) the greater the difference between current classroom practice and the (new) content of staff development, the greater the time and effort required (Showers 1982; McLaughlin and Marsh 1979); but (4) modest staff development investments stretch very far indeed when teachers are well organized at the school level to provide support for one another (Little 1987).

Most teachers who have attended conferences (59%) report spending 10 hours or less in follow-up from workshops and conferences; a small percentage (8.4%) reports follow-up of more than 50 hours. Those with the highest participation in follow-up also reported the greatest impact on their teaching. According to teachers surveyed by mail, an investment of more than 10 hours following a workshop or conference markedly increases the apparent benefit (Table III-3).

Table III-3 Access to Classroom Follow-Up and the Impact of Staff Development

*Based on a mail survey of California teachers
(N=749)*

Hours spent in follow-up to workshops/conferences	Teachers participating in this level of follow-up	Teachers who say the workshops/conferences had a "great deal" of impact on their teaching
1-10 hours	59.4%	21.9%
11-50 hours	32.3%	49.7%
50 or more hours	8.4%	81.8%

Staff developers share teachers' convictions that follow-up time and assistance are crucial aids to classroom improvement; they also find it difficult to match their conviction with action. Ultimately, a small staff of staff developers in a district or county office cannot reasonably expect to engage in fruitful consultation with individual teachers; mutual support must be organized closer to the school and classroom. Follow-up as a component of *district* activity becomes less problematic to the extent that *schools* can be organized to receive new ideas and to support teachers in their use; the issue of classroom change is in large part an issue of out-of-classroom time during the salaried workday.

The third measure of intensity is the relationship between staff development and other developments in curriculum, instruction, and organization of students for learning. Staff development integrated in a larger program of curriculum development and school improvement, or an individual's long-term plan for career development, might reasonably be expected to yield greater benefit than activities that are isolated from other developments

in the lives of individuals, classrooms, and schools. The School Improvement Program (SIP) is one vehicle for ensuring connections between staff development and a school program. Across the 30 districts, SIP funds supported 56 percent of school-based staff development hours.

In a mail survey of principals, slightly less than one-fifth said that their schools were participants in at least one special project with a staff development component. Among the 97 schools included in the case study districts, 15 schools (15.5%) described staff development activities that fit this description.

Evaluation of Staff Development. The evaluation of staff development in most California districts is a narrowly conceived affair, yielding little insight into the classroom benefits that might be realized. Although virtually every teacher and administrator in California has been asked to rate his or her satisfaction with the objectives, activities, materials, and leaders of discrete events, few have participated in a more comprehensive assessment of the total array of professional development opportunities. (Among the 30 sample districts, 8, or 27 percent, engaged in systematic program evaluation.) Fewer still have been invited (or required) to supply systematic evidence showing how they or their students have profited (or not) from participation in staff development.² And in only 1 district in 30 was staff development linked to personnel evaluation.

The promises and pitfalls that might follow from linking staff development to personnel evaluation have been hotly debated. Opponents argue that teacher evaluation is unequal to the task of guiding (or rewarding) professional development. Conceptually, teacher evaluation criteria and methods often reflect a narrow, technically oriented, behaviorist conception of teaching. Such criteria and methods may be adequate to the task of basic personnel decisions—new hires, tenure, or dismissal—but be ill-suited to the task of determining avenues for professional improvement. Politically and institutionally, critics maintain, evaluation is better equipped to serve purposes of accountability than improvement. And technically, they say, evaluation measures cannot match the intellectual and social demands of teaching.

Proponents of a closer association acknowledge the technical and political difficulties surrounding the evaluation of teaching or administration, but they counter that a closer link between the two will force higher standards for each.³ Staff development

² This is not to promote a narrowly technical or mechanistic view of teaching in which every occasion of staff development is converted to a checklist of observable behaviors. It is, however, to suggest that "satisfaction ratings" are a woefully inadequate test of the return that participants or taxpayers earn from a sizable investment of time and other resources and to propose that teachers—as professionals—have a stake in confining their participation to those activities that they can demonstrate will produce the greatest advances in understanding, practice, and commitment.

³ In a book to be released in 1988, Milbrey W. McLaughlin and R. Scott Pfeifer argue that, contrary to prevailing view, teacher evaluation can and must serve both the purposes of accountability and

content, they argue, will be more consistently linked to actual instructional or management assignments. Advocates propose that motivation is diminished when there exist no mechanisms for crediting teachers' or administrators' improvements or their origins in staff development. By forging a closer tie between evaluation and staff development, teachers or administrators in difficulty would be more likely to receive productive support and assistance; those doing well would be more likely to receive both formal and informal recognition. And the public would be granted more persuasive evidence that opportunities are matched by accountability. Opponents outnumber proponents, however, and the debate is unlikely to be resolved any time soon.

PUBLICLY SUPPORTED STAFF DEVELOPMENT OPPORTUNITIES OUTSIDE THE DISTRICT

Over the past two decades, school districts have assumed a major responsibility for the continuing education of the teachers and administrators they employ. Nonetheless, districts cannot plausibly satisfy all the professional needs and interests of their employees. In California, county offices of education and public universities have also taken a role in K-12 staff development. In examining the staff development services each provides, this study has pursued the question of an appropriate match between staff development purposes and the institutions purporting to fulfill them.

County Offices of Education and County-Administered Regional Programs

In other arenas, the role of a county office is clearly defined: counties provide cost-efficient fiscal or student services to small and rural districts. The county's "niche" in the field of staff development is far less uniform and clear. *As providers of staff development to California's teachers and administrators, county offices of education are not a single institution; rather, they are 58 distinct entrepreneurial entities.*

When providing services out of a general ("other") fund budget, counties closely resemble districts. They offer a diverse menu of workshops dependent on individual enrollments, host conferences, and occasionally mount invitational school improvement programs in which staff development is one component. County office staff, like district-level staff developers, prove to be a knowledgeable group, intent upon providing helpful service and acutely sensitive to the limitations of agency size in relation to teacher and administrator population. In the face of limited resources, however, most counties have done little to forge a staff development policy that would distinguish the county office from

improvement. The connections between evaluation and staff development prove crucial to their argument. Three California districts are among the case examples that support the argument.

districts or universities, thus furnishing them with a distinct identity among service providers.

Some counties—perhaps one-fourth—have developed statewide reputations for developing well-informed “cutting edge” programs in collaboration with local districts and schools. The largest counties, Los Angeles and San Diego, have taken a lead in designing and testing experimental programs of one sort or another. Los Angeles County, for example, is on the point of launching telecommunication services to nearly 100 districts that will reduce the “transportation drain” on staff development resources.

The largest counties, those with urban centers and ready access to universities, have been home to innovation. Rural counties with meagre staff budgets and vast geographic distances have been hard pressed to meet the minimum requirements of state mandates. Asked how they envision their own role in staff development, county administrators placed greatest premium on service to small and rural counties (Table III-4). But the challenge associated with that aspiration is poignantly revealed by an administrator in one of the state’s most remote counties, who wrote:

There is one person on the county staff responsible for coordinating curriculum services, including technology, instructional materials, audio visual, consolidated application, student activities, grants, coordination of state and federal projects, [and] all subject matter and general staff development....The trainer of trainers model doesn’t work well since we have no county subject consultants and districts can’t release a full-time master teacher to attend the necessary workshops...

Table III-4 County Office Administrators' Views of the Agency's Staff Development Role

	Should be a major role for county	Has been a major role for county
Provide services for small or rural districts	86.20%	75.00%
Coordinate multi-district events	82.10%	60.70%
Comprehensive improvement programs with invited district participation	67.90%	44.40%
Conferences or training not offered by districts	64.30%	42.90%

The author of that statement is not alone. Administrators in 15 (52%) of the 30 counties responding to the county survey rated "the distance participants must travel" as the number one obstacle to their ability to provide staff development; "local board policies restricting release time" were an impediment for 12 (41%) of the districts.

County Administration of Regional Programs. Twenty-six of California's 58 counties have served as administrative home to one or more of the state's regional service programs: the Teacher Education Computer Centers, the Administrator Training Centers, three of the nine Special Education Resource Network sites, and other smaller programs. The regional programs housed exclusively in the counties reflect two main implementation or service strategies: the Teacher Education Computer Center model and the California School Leadership Academy model.

The 17 TECCs began with a mission derived from the escalation in computer technology. In their first two years, TECCs conducted "awareness sessions" and introductory skill workshops aimed at producing rudimentary computer literacy among the largest possible number of teachers and administrators. With the passage of SB 813 and

publication of the Model Curriculum Standards, state expectations for the TECCs expanded and broadened. TECCs came to resemble the all-purpose regional service agency found in other large states.

Although costs of program development and program delivery remained decentralized, decisions about program direction came increasingly under the purview of the State Department of Education. Tensions in TECC governance began to be felt, as the TECCs found themselves pushed to respond to broad state-level reform priorities while remaining accountable to regional policy boards for specific objectives and activities tailored to local circumstances.

Over a three-year period, the TECCs reacted to evolving state priorities by a steady increase in the proportion of activities devoted to curriculum improvements and by a corresponding reduction in computer-related training disconnected from subject area content. In 1983-84, computer awareness sessions and other computer instruction topics dominated two-thirds of the TECC services; in 1985-86, computer-related activities made up slightly less than 40 percent of all services, while nearly 60 percent of activities focused on academic curriculum areas.

To retain visibility in their (sometimes vast) service areas, most TECCs continued to offer a large number of one-time activities ("awareness" or "information" sessions) designed to reach a large number of teachers and administrators. At the same time, the pressure to demonstrate classroom impact led the TECCs to a small but consistent shift toward the kind of multiple-session activity thought to afford a measure of depth and continuity in participants' learning. Nonetheless, inconsistency in the demands placed on TECCs resulted in services that varied widely in content, length, conditions of participation, and access to follow-up.

The shift from a technology orientation to a broader curriculum improvement mandate stretched TECC capacities thin and highlighted some of the dilemmas inherent in regional service delivery. In effect, TECCs were charged with duplicating the curriculum breadth and depth of a university while retaining close involvement with practitioners. With the elimination of the TECCs in July 1987, county administrators and specialists found themselves pressed to fill the gap left by the TECC subject area specialists. The Director of Curriculum/Instructional Support in one rural county writes:

Without TECC, providing assistance to the districts to implement the new frameworks rests on me or it doesn't happen. During the last three months I have attended approximately 17 meetings all over the state [in math, English/language arts, and history/social science] trying to gain a sufficient level of expertise to provide some guidance to the districts. ... It is already evident that there is no way that I can properly inservice school sites.

But the task of supporting curriculum reform is arguably too big for county offices, with or without the resources of the 17 TECCs. County offices, charged with service to local districts, tend to know those districts well; county staff might reasonably serve as a bridge between the subject area resources of a university and the day-to-day requirements of a district, but they are unlikely to serve well as the sole support of districts looking for guidance on curriculum revision. Visible by their absence were joint county-university plans for assisting the implementation of the Model Curriculum Standards.

On the other hand, a uniform vision of instructional leadership and centralized control over program development characterizes the California School Leadership Academy (CSLA). Decisions regarding curriculum priorities and criteria for the hiring of trainers both were centralized in the academy's Institute for Training Development and Research; the responsibility for program delivery fell to the system's 11 Administrator Training Centers. In funding this combination of centralized development and decentralized delivery, the state sought leverage on its "developmental capital"; in the county-administered academy, it gained a measure of control over program direction and program quality, a close match with other reform priorities affecting schools and school leadership, and an ability to move the pace of development quickly. In the short run, at least, it sacrificed the conceptual breadth and depth associated with university-based administrator credential programs or advanced degree programs; the California School Leadership Academy stands as a small "parallel system" of administrator preparation, with no structural tie to the state's credential requirements or credentialing institutions.

The CSLA curriculum is a product of a small group of experienced administrators and staff developers. Curriculum modules, ranging in length from a few hours to six days, are arrayed in a three-year sequence that begins with analyzing the instructional program and develops to include training in the areas of curriculum development, test interpretation, staff development and evaluation, and communication with parents. Throughout the curriculum runs the thread of "increasing leverage as an instructional leader with an obligation for the steady improvement of the school." Although the "program" delivered by each of the 17 TECCs varied widely, the program of the 11 ATCs is remarkable for its commonalities; 80 percent of the ATC budgets are devoted to delivering the central curriculum. Like TECC staff, the ATC staffs are small in relation to their service population; they are well able to organize the required sequence of structured training but less able to satisfy their aspirations for follow-up consultation and assistance.

Asked to assess the relative merits of a "TECC-style" model and an "ATC-style" model for regional service delivery (Table III- 5), county administrators declared themselves reasonably satisfied with the content of both programs; similarly, the majority found both models "equally good" at reaching all districts in their service area, securing participant satisfaction, and enhancing other county staff development. Those administrators who were divided about the relative worth of the two models tended to favor the TECC model's responsiveness to local needs and its compatibility with other county

staff development. Administrators were also inclined to believe that the ATC model was less cost-effective than the TECC model, though it is unclear whether their belief would be borne out by a program audit.

Table III-5 Comparing Two Models of Regional Service

	Both models equally good	TECC-style model better	ATC-style model better	Both models equally bad
Quality of program content	65.5	17.2	17.2	0
Meeting local needs	44.8	34.5	17.2	3.4
Participant satisfaction	57.7	19.2	23.1	0
Participation by all districts	55.6	14.8	22.2	7.4
Enhances other county staff development	55.2	20.7	13.8	10.3
Cost-effectiveness	40.7	25.9	14.8	18.5

The county offices of education, together with the regional service programs they administer, represent the state's effort to supplement professional development opportunities. Other states, too, have made provision for county or regional service agencies. New York has supported the BOCES (Board of Cooperative Educational Services) for many years and more recently has funded 74 Teacher Centers. New Jersey created and then dismantled a set of Educational Improvement Centers. Among the western states, Colorado, Utah, and Nevada all support regional service agencies. It seems inescapable that California, with its geographic size and population diversity, must consider structure(s) for the regional delivery of staff development and other educational services. As it does so, a closer look at the experience of other states may be in order.

University Involvement in Staff Development

California's public universities have contributed to K-12 staff development with formal programs that operate independently of the universities' degree programs or other graduate course work. In the University of California system, the California Writing Project serves as a model of substantively rich, strategically sophisticated professional development. In the California State University system, recently funded intersegmental programs have promoted collaborative arrangements between university campuses and local districts that have prospects for strengthening preservice teacher preparation and the induction of new teachers. On the whole, however, the role of the CSU system in staff development is less consequential than one would predict in light of its prominent role in preservice teacher preparation and in light of the regional dispersion of its 19 campuses.

The California Writing Project serves as one model that deserves attention for university-based staff development. The project, which has earned the admiration of teachers and administrators throughout the state, has served as a model for other university-sponsored staff development programs. Certain key elements are significant to policy makers and program architects.

First, the program has explicit goals that are clearly and consistently linked to student learning—the improvement of students' ability to write. Second, the policy that governs program strategy and activity is derived from tested beliefs about effective staff development. Two major premises underlie program operations.

First, the program operates on the principle that "teachers will teach teachers." Thus, the summer institute, the "hub of the program," (Gray, in press, 13), is reserved for training of a teacher consultant cadre that will be well equipped to lead staff development activities in local schools and districts. To participate in the summer institute, teachers must survive a two-stage nomination and interview process. By starting with successful teachers of writing, the program has established an orientation toward "celebrating teaching" rather than "fixing teachers." Over time, the program has assembled a sizable corps of teacher-consultants who have been prepared by the project to conduct the school-year programs. They contribute to refinements of the program's content and process and conduct the school-year inservice sessions which reached more than 34,000 teachers in 1986-87 alone.

Second, the program operates on the principle that long-term incremental activity will have more effect than "one-shot" workshops. Thus, the program has a policy of "no one-shots," organizing its school-year offerings in a series of 10 (preferred) or 5 three-hour sessions.

Today, the program boasts a university-based regional delivery system that extends to 8 University of California campuses, 10 California State University campuses, and the

University of Southern California. While the subject-matter orientation benefits from the university affiliation, the host campuses operate in close partnership with districts, sharing both program costs and the expertise required to refine the program and provide local services.

Finally, the program exhibits commitment to program evaluation and program development. It has assembled a detailed record of its own learning, both accomplishments and failures, from its inception in 1973.

DISTRICT ADMINISTRATORS' APPRAISALS OF THE QUALITY OF STAFF DEVELOPMENT PROVIDERS

The success of state-originated staff development initiatives is largely contingent upon their reception in local districts. A survey of district administrators provided insight into the kinds of staff development that district administrators support or oppose.

District Administrators' Priorities

A district's staff development choices may be shaped in part by market forces—what's available, in what form, with what match to pressing needs, and with what credibility among teachers. Choices may be shaped in part by a district philosophy that dictates the degree of centralization or decentralization, the relative emphasis on skill training versus other forms of professional development, and teachers' influence in deciding the uses of a staff development budget. Finally, choices may be shaped by external pressures or constraints, ranging from a school board's policy on release time, to state legislation, to regulations governing the use of categorical monies.

District administrators were asked to indicate the priority that their district placed on each of 11 possible program choices (Table III-6). Administrators' responses display clearly their preference for increased centralization and increased "alignment" of staff development with other district and school priorities.

Table III-6 Administrator Preferences for Selected Program Conditions

*Report of district superintendents surveyed by mail
(N=265)*

	No activities like this 0	Low priority 1	2	Mid priority 3	High priority 4	5
Well-developed program package	4.2	3.8	4.6	16.1	19.9	51.3
For most or all teachers/administrators	0.8	0.8	4.2	17.5	24.0	52.9
Consistent with district-wide plan	0.4	0.4	1.9	11.1	23.4	62.8
Consistent with school goals	0.4	0.0	1.9	8.7	25.8	63.3
Proposed by individual teachers	1.1	1.1	11.0	31.9	33.5	21.3
Planned and conducted by teachers and administrators at each school site	2.3	3.4	10.3	24.1	30.7	29.1
Available on a cost-sharing basis	16.3	16.7	15.6	25.1	17.1	9.1
Available through mentors/resource teachers	4.2	3.4	9.5	31.2	24.7	27.0
Requested by a large number of teachers or administrators	3.5	1.2	3.1	12.7	36.9	42.7
Associated with classroom follow-up	2.7	2.7	8.7	30.0	29.3	26.6
Targeted to schools eligible under categorical program guidelines	12.1	10.9	10.2	25.8	24.6	16.4

Quality of Services Available to Districts and Schools

Districts use of a range of services from individual consultants and other agencies. In some instances, they purchase such services directly, though the total cash outlay is not great (less than two percent of total staff development costs). In other instances, districts are the indirect beneficiaries of staff time, facilities, or materials provided to the district at no cost as part of programs administered by other agencies or institutions; about one-third of district-level staff development hours are partly supported in this fashion. How do district and school administrators describe their use of other agencies and their satisfaction with the quality of available services?

District Administrators Ratings of Specific Service Providers. District administrators rated the quality of each of 15 service providers, including private consultants, who offer staff development for teachers (Table III-7). With relatively few exceptions, district administrators have had at least one contact with most of the available service providers during the 1986-87 academic year. Among the most favored programs or service providers were the California Writing and Math projects and services offered by county offices and Teacher Education and Computer Centers.

Table III-7 What Quality of Service Do Districts and Schools Receive From External Staff Development Providers?*(Perceptions of district and school administrators surveyed by mail.)*

Service provider	District Administrators (N=265)		School Administrators (N=117)	
	% having contact	% of users rating quality high	% having contact	% of users rating quality high
Your local County Office	97.3	48.8	78.6	37.0
Local Teacher Education and Computer Center (TECC)	93.1	52.5	73.5	47.7
Any Curriculum Implement- ation Center (CIC)	35.7	45.1	21.4	28.0
Special Education Resource Center (SERN)	58.7	34.1	31.6	40.5
California Writing Project (any local branch)	82.4	72.2	56.4	71.2
California Math Project (any local branch)	65.4	64.6	43.6	72.5
State Dept of Education	77.8	16.0	40.2	14.9
California State Univ. (CSU)	48.1	18.6	{ 37.6	{ 40.9
Other public and private colleges and universities	43.7	31.0	{	{
Private Consultants	79.6	65.8	48.7	49.1
Teachers and administrators from neighboring district	73.3	47.1		
Federal Teachers Centers	4.9	27.3	n/a	n/a
Professional associations (CTA, ACSA, etc.)	59.4	31.2	n/a	n/a
Subject area associations (NCTE, NCST, etc.)	39.6	34.8	n/a	n/a
Univ. programs of teacher inservice (excluding regular coursework)	47.0	21.3	n/a	n/a
Own district	n/a	n/a	81.2	54.7
Mentors	n/a	n/a	80.3	51.1

Site Administrators Ratings of Specific Service Providers. Principals surveyed were asked to assess the quality of 12 service providers. The principals make the heaviest use of their own district staff development offerings and, where possible, mentor teachers. Their ratings, which also appear in Table III-7, show substantial agreement with district administrators on the relative worth of external providers. For principals, as for district administrators, the California Writing and Math projects stand out as models worth preserving and emulating.

District Administrators Satisfaction With Staff Development Leaders. Given the high cost of leadership associated with formal staff development activities at the district level, how satisfied are district administrators with the resources now available? We asked them to assess their satisfaction with each of 15 categories of staff development leader (Table III-8). Their responses display highest satisfaction with their own "in-house" personnel, especially district staff developers and mentors, and with individual consultants.

Obstacles to Staff Development Services. District administrators were asked to rate the most and least serious obstacles they faced in providing staff development. They are generally confident of their ability to design and conduct good staff development, given adequate resources and parent and community support. Districts were largely in agreement that their own personnel were sufficiently knowledgeable about good staff development, but the quality and quantity of opportunities suffered for lack of funds.

The difficulties attached to inadequate funding were compounded in rural and remote districts, where transportation costs tend to consume a large share of any program budget. Districts varied widely in the extent to which they enjoyed parent support for staff development, but rarely do district administrators believe they are unduly constrained by provisions of the local union contract.

Staff development in California has its predictable share of isolated, fragmented activities, only loosely describable as staff development and often summed up disparagingly by teachers as "irrelevant one-shots." But California districts also appear to have a small but increasing proportion of thoughtfully designed, intensive experiences that are well targeted to teachers' interests and instructional assignments. More often now than in the recent past, district-sponsored staff development combines subject area content with pedagogy, involves teachers for the equivalent of two days (13-16 hours) or more, is voluntary, and offers classroom follow-up.

Table III-8 How Satisfied Were District Administrators With Leaders of Staff Development?

*Report of District Superintendents Surveyed by Mail
(N=265)*

Staff Development Led By:	Didn't Use	Satisfaction Among Users		
		Dissatisfied or Very Dissatisfied	Neutral	Satisfied or Very Satisfied
Outside presenters who are private consultants or trainers	12.9	2.7	8.6	88.7
University faculty, part of special projects (e.g. California Writing or Math)	31.3	7.1	19.5	73.4
Other University professors	62.1	22.7	36.4	40.9
State Department of Education consultants	48.7	30.3	33.6	36.1
County office staff (excluding TECC)	16.3	6.8	22.3	70.9
TECC trainers	17.4	7.0	18.6	74.3
District specialists or administrators from another district	42.0	2.2	18.7	79.1
Classroom teachers from other districts	47.2	4.9	23.8	71.3
Your own district staff developers	21.6	0.5	4.2	95.3
District curriculum specialists	42.8	0.8	9.2	90.1
Mentor Teachers	14.1	3.3	7.0	89.7
Other resource teachers or teachers on special assignment	48.7	2.6	17.2	80.1
Site administrators	24.2	0.5	19.2	80.2
Classroom teachers (other than mentors or resource teachers)	25.2	1.7	14.9	83.4
Publishers' representatives	44.3	16.6	38.6	44.7

SUMMARY OF THE ORGANIZATION AND DELIVERY OF STAFF DEVELOPMENT

This assessment of local organization and delivery of staff development has produced four main conclusions:

1. Local school district capacity to organize and deliver staff development has grown steadily.

- District administrators and staff developers reveal considerable sophistication about the preferred design of staff development activities. They favor activities closely linked to major district or school priorities, measured in days, not hours, with an appropriate combination of content and methods, and accompanied by classroom-based consultation.
- Compared to the involvement, influence, and sophistication of central office personnel, teachers have remained relatively uninvolved, uninfluential, and unsophisticated about options for professional development purpose, content, and form. Teachers are involved directly in planning or leading less than 10 percent of all participant hours in staff development activity.
- Staff development is a relatively centralized activity within medium-sized and large districts, planned and delivered by district specialists, administrators, and external presenters or consultants. At the local level, the largest expenditure for staff development programs is "leader time"—the salary cost of the specialists and administrators who plan and lead staff development activities.
- In the absence of any comprehensive and cost-effective strategy for overcoming the problems of distance, teachers and administrators in the state's vast rural areas enjoy fewer professional development opportunities than their counterparts who have easier geographic access to staff development providers.
- Noteworthy examples of staff development exist in districts, county offices of education, and universities. The main features of these programs can be identified and thus might be supported on a larger scale.

2. Selected staff development activities have sound prospects for favorably influencing classroom performance and the overall quality of school programs. On the whole, however, the current array of staff development activities and incentives is unlikely to yield substantial change in the thinking or performance of California's classroom teachers.

- Teachers describe worthwhile staff development in terms that are consistent with prior research: effective staff development is closely tied to current instructional

assignments and circumstances and permits intensive study by pursuing one or two key topics over a period of weeks or months.

- Despite the knowledge, intentions, and preferences of most district staff developers, relatively few staff development activities are linked to a well established school support system, and relatively few teachers believe they are accountable for using (or at least testing) what they learn. Intellectual content is often thin.
- Classroom and school follow-up appears to be effective in ensuring classroom impact, but it occurs infrequently. Few teachers (less than 10 percent) devoted 50 or more hours to follow-up from staff development in a one-year period, but those few teachers were four times more likely to report large classroom effects than were teachers who devoted less than 10 hours to follow-up.
- The quality of staff development is constrained by the sheer number of demands on teachers' time. When the salaried workday and work year provide teachers with relatively little out-of-classroom time, teachers' opportunities for productive staff development dwindle and their commitments to professional improvement are compromised.

3. California's staff development resources are spent in ways that mainly reinforce existing patterns of teaching, conventional structures of schools, and long-standing traditions of the teaching occupation.

- Staff development is largely market driven, a lengthy menu of discrete offerings available on a sign-up basis to individual teachers who "receive" information or materials from paid presenters. The training industry has dominated local district conceptions of staff development, and most professional development opportunities take the form of skills-oriented or materials-oriented workshops.
- Staff development does little to alter the isolated and isolating character of classroom teaching or to engage teachers themselves in an intellectually rigorous examination of curriculum and teaching methods. It occurs on the periphery of school and classroom life, a situation exacerbated and perpetuated by funding patterns, by a marketplace glutted with short-term skill training, and by a daily and yearly schedule that squeezes staff development into widely separated days or hours.
- Individual examples confirm the belief that staff development can be structured to support a more professionalized teaching force and to support schools that improve steadily. Nonetheless, what this study did *not* find was significant. There are few intensive, long-term involvements planned and carried out by groups of teachers

with common instructional assignments, using resources under their own control. There are few aggressive attempts to parlay the mentor role into a faculty leadership position, or to exploit leadership roles already in place (department chairs, for example). Teachers are rarely involved in shaping the content and form of staff development, or involved in evaluating its impact.

- Selected state initiatives are consistent with forces of professionalization in teaching. The Mentor Teacher Program has evolved steadily; mentors are far less likely to spend their time developing curriculum on their own and far more likely to work directly with other teachers. In conception, the Classroom Teacher Instructional Improvement Program rewarded teacher initiative and required a plan that would yield benefit in the classroom. The Cal Writing Project has demonstrated that a teacher-driven model of professional development, built on university-school collaboration and fixed firmly on student learning, can be both effective and efficient. The California School Leadership Academy was inspired by developments in school research, with its vivid descriptions of effective school leadership, and by the implementation demands associated with state reforms (especially the Model Curriculum Standards). These programs are in various states of maturity. Each has its favorable qualities and each has its flaws. Each is premised on assumptions that deserve—and often elicit—discussion and debate. As a group, however, they exemplify the state's attempt to develop or support professional development that advances the professionalization of the teaching occupation and of the school as an institution.

4. California's staff development activities go largely unevaluated compared to other educational initiatives.

- Staff development is evaluated regularly on a session-by-session basis that helps trainers to refine training activities; the most extensive evaluation efforts are directed to improving discrete staff development activities.
- Staff development is rarely evaluated for the importance or coherence of its overall program goals, for the relationship between staff development goals and other school improvement goals, or for the match between goals and strategies (ends and means). (There are instructive exceptions to this rule, such as the evaluation portfolio assembled by the California Writing Project and the two-year evaluation of district professional development assembled by one California district.)
- The impact of staff development is almost never tested at the classroom level. Program evaluations are dominated by participation rates and other process measures; summative measures of classroom impact are fewer and methodologically weaker.

- The impact of some of the most innovative, potentially promising, and costly state-funded initiatives, such as the Mentor Teacher Program, is largely unknown. Resources for program evaluation are rarely sufficient to gauge progress in program development or to assess the merit of particular strategies as they mature.
- Staff development is generally disconnected from personnel evaluation. Further, sentiment among most teachers and district administrators is in favor of keeping it that way.

IV. Teacher Participation in and Appraisal of Staff Development

The largest share of California's staff development—more than 90 percent of all staff development resources—is devoted to classroom teachers. This section summarizes teachers' own accounts of the professional development they have pursued both on their own and at the behest of the districts and schools that employ them.

INDIVIDUAL TEACHERS' CONTRIBUTIONS TO THEIR OWN PROFESSIONAL DEVELOPMENT

Personal responsibility for continuing education is an established tradition in the professions and in higher education. In exchange for time and money devoted to upgrading knowledge, skills, and professional reputation, individuals secure continued certification under state law and qualify for career advancement and higher compensation.

Individuals invest in their own professional development when they volunteer *time* outside the salaried workday to enroll in university or college course work, attend professional conferences, participate in workshops, join informal study groups, or keep abreast of professional reading. In addition, they incur *out-of-pocket expenses* for tuition, travel, books, and conference registration fees.

Teachers' contributions to staff development are substantial. Further, they are contributions of time and money on top of those already made simply in the course of teaching. In comments appended to the mail surveys, for example, individual teachers reported spending \$50 to \$100 per month on classroom materials and supplies. Although this study did not collect systematic data on these expenditures, it seems likely, given a choice about out-of-pocket commitments, that teachers opt first for expenditures close to the classroom.

Uncompensated (Volunteer) Time in District and School Staff Development

Approximately one of every five hours that a teacher spends in district or school staff development is volunteer time—time spent outside the salaried workday, with no compensation in the form of stipends or salary credit. Calculated on the basis of the average teacher salary, this time is worth \$502 per teacher. It is the equivalent of more than 10 percent of all public investment in locally administered staff development and nearly 60 percent of the current monetary expenditures for district- and school-sponsored activity. That is, for every dollar the district and schools spend to plan and conduct staff development activities, teachers contribute another 60 cents in volunteer time. Table IV-1

displays these numbers and also compares them to the average cost of a California classroom (\$93,000).

Table IV-1 What Teachers Contribute to District-Sponsored Staff Development

	Per teacher	% of total investment costs	% current monetary	% of classroom support costs
Volunteer time in district and school staff development	\$502	11%	58%	0.54%

Uncompensated Conference Attendance

Teachers attended an average of three workshops or conferences outside their districts during the one-year period; about one-quarter of the teachers incurred out-of-pocket expenses to attend. Fees for all conference or workshop participation averaged less than \$100 per year per teacher, though a small group (8%) reports having spent more than \$500 for conference attendance during the one-year period.

University and College Course Work

Formal course work offers teachers access to subject area expertise not readily available elsewhere and qualifies them to advance on the salary schedule. In the 12-month period beginning June 1986, it is estimated that slightly more than one-third (35.9%) of California teachers were enrolled in at least one course.¹

More than half of the course takers (62%) limited themselves to one or two courses, ranging from one to six semester units. Teachers with less than two years' teaching experience were most heavily involved in course work; more than half of the beginning teachers took university courses during 1986-87, and many were handling course loads totaling more than 12 semester units.

¹Estimates are based on the teacher mail survey. Enrollment rates for teachers interviewed by phone were slightly higher (39.7%).

What Teachers are Studying. Most teachers were engaged in course work directly related to teaching assignments. More than half (57%) of the teachers taking courses were doing so to upgrade subject area knowledge. Only about 1 in 10 teachers now attending a university is working toward an administrative credential; in the sample at large, however, this is less than five percent of all teachers, or about 1 in 20.

Out-of-Pocket Expenses. Compared to other options, course work is an expensive form of professional development for teachers. More than half of those taking courses (57%) paid more than \$200 in a one-year period to enroll in courses. Tuition and other out-of-pocket expenses might plausibly average between \$50 and \$100 per semester unit, and more for teachers in rural areas who may commute several hundred miles round-trip to attend class.

Salary Advantage as a Result of Coursework. When teachers invest personal time and other resources to complete course work and advanced degrees, they do so with some promise of future gain. Close to half of those enrolled in course work say that a main reason for doing so is to gain credits on the salary schedule. Teachers statewide accumulated an average of two semester units during a one-year period. When applied to advances on the salary schedule, the capitalized present value of one semester unit varies from one district to another. The present value also varies with the number of years a teacher will remain in the district. On average, the present value of the additional future salary resulting from one additional semester unit is approximately \$1,400 (see Appendix A).

It is interesting to compare the present value of future salary increments resulting from an additional semester unit (Table IV-2) with the amount of time required for a teacher to earn that additional unit. One semester unit at a university is typically awarded for 15 hours of class time. Because the present value of future salary increases resulting from that semester unit is approximately \$1,400 on average, a teacher can earn \$93.33 ($\$1,400/15$) for each hour of class time. In most college and university courses, however, participants are expected to spend at least two or three hours on homework for every hour spent in class. Thus, the implicit earnings per hour would be more like \$31 ($\$1,400/45$) if homework is included. This is only slightly higher than the current average hourly salary for a California K-12 teacher. However, district-sponsored workshops may award teachers one semester unit for 15 hours of participation without requiring them to do any homework; in this case, the teachers' implicit hourly earnings from the staff development activity would far exceed their regular hourly pay. *More generally, from the taxpayers' point of view, awarding semester units tends to increase the cost per participant hour of staff development activities.* From the district's point of view, it would be far more cost-effective to pay teachers a stipend at their regular rate of pay than to give one semester unit for a 15-hour staff development activity.

Table IV-2 Staff Development Investments in the Form of Salary Advances Based on Accumulated Semester Units

	Per ADA	Per Teacher	Per Hour	% Total staff devel. costs	Classroom support costs
Present value of future salary increases resulting from accrued semester units	\$127.79	\$2,862.60	\$33.38	62.49%	3.08%

Approximately three-quarters of the state's teachers are in a position to benefit financially from accumulated semester units; the remaining one-quarter (27%) have amassed 60 or more units beyond the B.A. and are likely to have reached the ceiling on local salary schedules.² In the next decade, the pool of teachers motivated to seek university credits will increase dramatically as more than 80,000 new teachers are hired to accommodate new growth and to replace teachers who retire or resign.

Career and Performance Advantage. Presumably, participation in university courses adds both depth and breadth to a teacher's knowledge. Evidence linking the level of a teacher's formal education to the level of student performance is weak at best and discouraging at worst (e.g., Hanushek 1986). Teachers in this sample, however, were generally confident about the favorable impact of courses they have taken during the past year. Nearly 90 percent of teachers enrolled in course work believed that their courses had been worthwhile; 38.4 percent credited coursework with "a great deal" of impact on their teaching.

STAFF DEVELOPMENT TEACHERS RECEIVED IN DISTRICTS AND SCHOOLS

Across the 30 case-study districts, reported staff development activities added up to more than 776,000 hours of district- and school-level staff development for teachers, or an average of 71 hours per teacher. Nearly all California teachers (95-97 %) participated in some version of local staff development during the previous year. Still, the level of participation varied. There is reason to believe that there are "enthusiasts" who sign up for a large number of voluntary workshops and conferences, who devote parts of their weekends and summers to staff development, and who remain involved in university course work; this group may be as high as 40 percent. Among them are teachers who compete for special opportunities, or who are specially recruited by principals, district

²Based on 1985-86 CBEDS data.

administrators, or peers to participate. Teachers who have served as mentors are one example. This group composes less than 20 percent of all teachers.

Most staff development activity takes the form of the conference or workshop, conducted as one-time events (24%) or as a series (76%). Most teachers have participated in four or fewer workshops or conferences during a one-year period. Although teachers typically attend at least one event with other teachers from their own school, team-oriented staff development remains more the exception than the rule.

Content and Focus of Staff Development

Staff development activities in 1986 reflect the renewed emphasis on curriculum following passage of SB 813 in 1983. Nearly three-quarters of all activities involved a combination of subject area content and teaching methods.

The last decade has seen the rise and (slow) fall of "generic pedagogy" as the dominant content of local staff development. Districts have often invested a sizable pool of resources in developing, purchasing, delivering, or promoting staff development organized around such topics. The reasons are several. First, pedagogically oriented staff development reflects certain basic realities of schoolteaching. For example, schoolteachers (unlike parents or tutors) teach "in a crowd," and effective classroom management is a crucial prerequisite to their success with students. One-fifth of all district and school site staff development addresses classroom management problems.

Second, the facets of "effective teaching" usefully mapped by classroom research during the past decade have been largely those of management and pedagogy; the front line of "development" has focused on practices of classroom management, instructional planning, and instructional delivery independent of subject matter.

Third, the centralization of staff development places a premium on discrete, structured curricula with some apparent relevance to diverse groups of teachers, regardless of grade level or subject area. District administrators look for "well-packaged" approaches that lend themselves to workshop-style presentation for large groups of teachers.

Critics of pedagogically oriented staff development have stressed its concentration on teacher behavior at the expense of student learning, its narrowly technical view of teaching, its insensitivity to the special pedagogical demands of specific subject disciplines and its vulnerability to gimmickry and faddism. Whatever the reasons, the relative prominence of "generic pedagogy" is on the decline. Teachers have pressed for greater fit between staff development content and subject matter content. State initiatives have moved districts to re-examine their staff development offerings and, in some cases, to reorganize

district administration to attach formally designated staff development responsibilities more closely to curriculum.

Thus, these activities reflect a pattern of long-established but slowly declining commitments to staff development centered on teaching methods and a corresponding awakening of interest in continuing teacher education that is more richly connected to curriculum. In sum:

- *Academic content areas* were a major focus of staff development, with the heaviest concentration on reading, language arts, math, and science. Districts have begun to emphasize a combination of subject area content and pedagogy; nearly three-quarters (72 %) of the participant hours fell into this category. Districts rarely sponsor activities that focus on content areas independent of pedagogy.
- Staff development targeted toward “*generic pedagogy*” remains common (29 percent of participant hours), but training based in the “Madeline Hunter” model alone accounts for less than 10 percent of all staff development activity.
- The needs of *special student populations*, ranging from the bilingual to the gifted, were addressed in about one-third of all participant hours in staff development. Districtwide activities were more likely to focus on special student populations than were school-site activities.
- Relatively little formal staff development is devoted to preparing teachers for *changes in instructional or other assignments*. Of all possible work-related changes, those in subject area assignment are most likely to be accompanied by staff development, but the total level of activity is small. Some districts have begun to prepare teachers specifically for work with other teachers, in the capacity of mentor, staff developer, or “colleague coach.”

Making Time for Staff Development

Staff development competes for teachers’ time and attention with other obligations, most with greater immediacy. When do teachers—and districts—make time for staff development? Table IV-3 summarizes the distribution of participant hours across four scheduling possibilities, each with its own cost implications.

Table IV-3 Teacher Participant Hours Within Cluster Sample Districts By Schedule (Based on interviews with 280 staff development administrators and 97 school leaders)

Over two-thirds of school participant-hours were during the work day but without substitutes. District level activities were spread evenly across schedule possibilities.

	Percentage of School Level Activity Participant Hours	Percentage of District Level Activity Participant Hours	District* Estimates of Scheduling Proportions (N=265)
During the Work Day But Without Substitutes	69%	24%	22%
During the Work Day and With Substitutes	12%	25%	27%
Outside the Work Day but with Unit Credit or Stipends	8%	24%	33%
Outside the Work Day and No Compensation	10%	24%	27%
Total	99%	98%	99%

* This column displays results from the district mail survey. Note the agreement with the adjacent column.

Staff Development During the Workday. Teachers argue that their most productive involvements in staff development occur during official work time, when they are freed both from the pressing obligations of instruction and from other out-of-school commitments. The two major options for districts are pupil-free days, when pupils remain home while teachers work, and release time, when pupils are instructed by substitute teachers. A third option, managed at the school site, is to design teaching assignments and schedules to permit regular, daily interaction among pairs or groups of teachers working together on some problem of program or staff development; data collected from teachers and administrators suggest that this is a relatively uncommon arrangement. Approximately one-half of participant hours in district-sponsored activity occur during regularly scheduled work time, with or without substitutes.

Under provisions of AB 551 (School Staff Development)³ and the School Improvement Program (SIP), schools are permitted up to eight *pupil-free days*. In the mail survey of noncase-study districts, nearly three-quarters of the nearly 300 districts that responded reported that their boards permitted the use of pupil-free days, though a large majority (82%) used four or fewer days. Pupil-free days were used to conduct 27 percent of the participant hours recorded among the 30 case-study districts.

Most districts use pupil-free days the same way they use other blocks of staff development time—to mount structured skill-training workshops for groups of teachers. In one example, a district organized a full day of staff development for all elementary school teachers on the use of “hands-on” science activities. The district’s current monetary expenditure for the one-day event was less than \$20 per teacher, representing a way of stretching limited monies available through PL 98-377 (math/science teacher training). Note that if the reductions in instructional time were treated as an “opportunity cost” and calculated at the rate of teachers’ average salary, the figure would rise to \$167 per teacher.

Nearly all districts in the state permit teachers *release time* from classes to participate in staff development. (In districts where release time is prohibited, or hard to arrange, teachers take sick days and personal leave days to attend conferences.) Nearly half of all district staff development, and more than four-fifths of school site activity, occurred during the *salaried work day*. Most school site activity was conducted without the use of substitutes; about half of the district-level activity required the use of substitutes.

Substitutes represent the second largest component of current monetary cost for district and school staff development and the largest component of current monetary cost directly devoted to the support of teachers. The investment is a sizable one. How is release time best spent?

Asked about their preferences for the use of release time, teachers give highest priority to activities that give them access to ideas and access to their colleagues (Table IV-4). Although there are some differences in the ordering of preferences by years of teaching experience and by school type (elementary, middle, high school), the three favored options remain consistently the same: classroom observation, workshop or conference attendance, and joint lesson planning with colleagues.

³ Funding under AB 551 was eliminated from the governor’s budget in July 1987. However, the program provided staff development support during the period of this study.

Table IV-4 How Teachers Would Use Release Days

*Perceptions of teachers surveyed by mail
(N=749)*

	Less Than 2 (N=32)	3-10 (N=175)	11 or More (N=534)	Total Sample
Visit classrooms/school to observe	56.3	57.7	54.3	55
Attend a workshop/conference	65.6	50.9	50.9	51.3
Lessons/units with colleagues	40.6	48.6	44.6	45.3
Lessons/units alone	25	25.1	34.5	31.9
Read books/journals re: teaching	9.4	7.4	6.2	6.7
Other	6.3	6.9	3.2	4.1

Staff Development Outside the Salaried Workday. For every 10 hours that teachers spend in staff development during regular work time, they spend nearly 8 hours outside the workday. Teachers attend courses, institutes, seminars, conferences, and workshops in the evenings, on weekends, and during the summer.

Summer provides a block of uninterrupted time that lends itself well to intensive study of the sort that proves difficult when teachers are juggling the many competing demands of school and classroom. Summertime work takes four forms.

First, university institutes convene teachers who share common subject area interests and similar instructional assignments for periods ranging from one to five weeks. The institutes combine the disciplinary depth of a university with a focus on teaching and collegial interaction that is less possible in regular course work. In 1985-86, institutes were available to teachers in most of the major academic areas: writing and language arts, science, math, and the humanities.

Second, in a relatively recent innovation, some districts have combined staff development with the operation of a summer school. In this configuration, staff developers double as summer school instructors. Teachers spend part of their day teaching and part of their day learning.

Third, conventional one-day workshops frequently fill the days preceding the opening of school. Teachers attend on a voluntary sign-up basis, sometimes receiving a modest stipend.

Fourth, curriculum development teams convened during the summer may serve staff development purposes. Summer is a productive time for the development and

refinement of curriculum in districts, and teachers are frequently supported for part-time work on curriculum committees. Does curriculum work add to a teacher's understanding and enrich a teacher's repertoire of methods? Should participation in such groups count as staff development? The answers are not clear, and we have tended to avoid counting as "staff development" all those occasions on which teachers are involved in the review or development of curriculum, out of fear that we will dramatically (and inaccurately) inflate our estimate of the resources devoted to staff development. We list "curriculum groups" here in part to acknowledge the potential for combining curriculum development and staff development.

Although teachers complain about staff development squeezed into *evenings and weekends*, 29 percent of all participant hours occur during those times. Unlike most staff development scheduled for the summer, school-year activities have the advantage of timeliness—new ideas may be tested in the real-world context of the classroom. Evening and weekend activities, however, have the disadvantage of requiring teachers' concentration and energy when they are fatigued by the full-time exigencies of teaching.

Teachers are compensated for approximately half of the hours they spend in staff development outside the salaried work day. The *compensation* takes two forms: stipends and salary credits. Twenty-three of the 30 case-study districts offered stipends to teachers attending district-sponsored conferences and workshops outside the work day. Stipends, offered for 19 percent of the participant hours in district and school activities, ranged from "token" amounts (e.g., \$25 for a day's workshop) to an amount based on a proportion of teachers' average salary (stipends average approximately \$15 per hour). Stipend costs accounted for less than 7 percent of total staff development costs and approximately 16 percent of current monetary costs incurred by districts.

Teachers accrue credit toward salary advances by attending district-sponsored activities outside the salaried workday. Typically, district salary units are calculated on a university model: 15 hours of "seat time" earns one semester unit. District units, unlike university credits, are not transferable across districts but are treated as the equivalent of university units for purposes of salary advancement in the district where they are earned.

Opportunities for Professional Development During the Salaried Workday

An emphasis on formally organized staff development programs may underestimate both the volume and the potential impact of professional development opportunities incorporated in the salaried workday. Three major opportunities can be described, each with implications for state and local policy:

- classroom visitations and observations among teachers
- regularly scheduled meetings of entire faculties, departments, grade levels, or interdisciplinary teams
- regularly scheduled time for individual teachers to plan or confer with colleagues

Classroom Visitations and Observation. The opportunity to watch other teachers at work with students is rare in most schools but highly valued among teachers who have participated in observation on a regular basis. Teachers consistently ranked classroom observation among their first three choices for release time. One teacher wrote, "Visiting other classrooms and observing successful techniques is the single most valuable activity."

To achieve effect (beyond simply breaking teachers' isolation from other professional adults), classroom observation must occur more than once or twice. The cumulative effect of classroom observations is revealed in Table IV-5. A sizable impact on teaching begins to emerge only with four to six observations; it is felt more quickly when the observation also includes an opportunity for discussion between the two teachers.

Table IV-5 What Level Of Involvement In Classroom Observation Is Required To Produce An Impact On Teaching?

*Reports of teachers surveyed by mail
(N=749)*

Number of observations	Percentage of teachers reporting great impact on their teaching	Number of observations combined with discussion	Percentage of teachers reporting great impact on teaching
One	1.4%	One	1.6%
2-3	6.0%	2-3	9.4%
4-6	16.1%	4-6	28.6%
7 or more	73.2%	7 or more	94.1%

Overall, somewhat more than half (57.4 %) of teachers believe that their school offers them an opportunity to observe or to be observed by other teachers. While many (but not all) of those teachers say they have taken advantage of that opportunity at least once, the overall result is this:

- Fewer than half of California's teachers (45%) have observed or been observed by a colleague in the last year.
- Far fewer still, less than 15 percent, have participated in observation often enough, and with enough teacher-to-teacher discussion, to affect the participants' classroom performance.

Administrators have a realistic grasp of actual observation rates, though they tend to believe they offer teachers more observation opportunities than teachers seem to perceive themselves as having. Administrators are also more sanguine than teachers about the impact of a small number of classroom visits.

Regularly Scheduled Meetings. Time is in short supply in schools; out-of-classroom time for teachers is especially scarce. To what extent are regularly scheduled meetings among teachers devoted to purposes that might be called staff development?

Faculty and other meetings are a routine part of work for most teachers. More than half of teachers work in schools where faculty meetings are held once or twice a month, usually lasting between 30 and 60 minutes. Elementary school faculties are more likely to meet on a weekly basis; secondary school faculties are more likely to meet once a month.

Less than 10 percent of teachers report that they work in schools where faculty meetings or other meetings are regularly used (i.e., on more than half the occasions) to focus on teaching. Administrators are more likely than teachers to see faculty meetings as accomplishing purposes of staff development.

Time for Joint Planning and Consultation Among Teachers. Teachers enthusiastically endorse the idea of special time to work with colleagues, but 80 percent say they rarely or never are granted time specially designated to do so. In secondary schools, where preparation periods are commonly a part of the master schedule, teachers who are out of class during the same period may choose to spend that time together. However, there is no guarantee that teachers who have reason to develop ideas or materials together will be free at the same time. In elementary schools, even individual preparation time is uncommon.

THE STAFF DEVELOPMENT EXPERIENCES OF BEGINNING TEACHERS

Fewer than five percent of the state's teachers—in the study's teacher sample—are beginning teachers. That figure will climb in the next decade, with the bulk of the hiring occurring in elementary grades. With few exceptions, staff development activities described in the case-study districts are not differentiated for teachers in various stages of a

career or at various levels of sophistication in their grasp of subject matter or pedagogy. Of more than 800 activities recorded in the 30 randomly selected case-study districts, three percent were specifically designed to assist beginning teachers.

Among the teachers surveyed, beginning teachers were the most eager to participate in staff development activities. More than four-fifths (84%) wanted more, compared to 64 percent of teachers with 11 or more years experience (Table IV-6). Beginning teachers, however, are less likely to believe that they have access to staff development and more likely to be disappointed by the impact of the staff development they do receive. They were less likely than their more experienced counterparts to attribute impact to workshops, course work, or observation. Is this a case of mistargeted content, of teachers who are not yet certain how to exploit opportunities, or of inadequate assistance in establishing the "fit" between what formal staff development provides and what classroom circumstances require? Mid-career teachers, those with 3-10 years of experience, are most confident about the benefits they derive from staff development, suggesting that such offerings may be most nearly targeted to their needs, interests, level of sophistication, and skill.

Table IV-6 Teachers' Preferences for More or Fewer Activities

Views of teachers surveyed by mail

(N=749)

- 69 percent of teachers say they want more staff development
- Preferences for staff development vary by teachers' experience:

Less than 2 years	84.4% want more
3-10 years	79.9% want more
11 or more years	64.0% want more
- 13 percent of teachers say they want less staff development

Time demands and out-of-pocket expenditures for materials and supplies hit beginning teachers the hardest. Those with less than two years' teaching experience were most heavily involved in course work, more than half of the beginning teachers took university courses during 1986-87, and many were handling course loads totaling more than 12 semester units. Beginning teachers also incur expenses associated with accumulating the basic supplies and supplemental materials that make the difference between a minimally supplied and materials-enriched classroom.

TEACHERS' APPRAISALS OF THE QUALITY OF STAFF DEVELOPMENT

Most teachers welcomed the chance to comment on the extent and quality of their professional development opportunities. More than 75 percent of the randomly selected teachers returned completed surveys; many appended long notes. Teachers responded from 48 of California's 58 counties, in over 300 school districts, large and small. This included teachers at all grade levels and at all levels of experience (though nearly three-quarters of them had 11 or more years' experience). As a group, these teachers closely mirror the ethnic profile of the state's teacher workforce.

The vast majority of these teachers are committed to the principle of steady professional improvement and are interested in obtaining access to more high-quality staff development activities. Teachers offered specific examples of staff development that they believe has enhanced their effectiveness in the classroom and bolstered their commitment to teaching. *Nearly 70 percent of all teachers surveyed wanted more, not less, staff development.*

Interest in additional staff development is most pronounced among beginning teachers, those with less than two years' experience; of that group, more than 84 percent would prefer more opportunities. The interest in staff development (as it is now organized) declines steadily with years of teaching experience. Nonetheless, "access to new ideas" remains the most compelling incentive for teachers throughout their career (Table IV-7).

Table IV-7 Teachers' Incentives for Staff Development

*Perceptions of teachers surveyed by mail
(N=749)*

Incentive	Total Sample (N=749)	Years of Teaching Experience		
		Less Than 2 Years (N=32)	3-10 Years (N=175)	11 or More Years (N=534)
Access to new ideas/materials	69.3	78.1	68.6	69.3
Credit on the salary schedule	38.7	25.0	45.1	37.6
Personal growth	37.2	28.1	32.6	39.9
Opportunities with colleagues	25.4	28.1	22.3	26.0
Stipends	14.0	9.4	10.3	15.4
Obtain advanced degree/credentials	10.71	28.1	19.4	6.7
Personal recognition	2.7	3.1	1.7	3.0

Strongest Incentives

Access to new ideas
Salary credit
Personal growth
Colleague contact

Weakest Incentives

Personal recognition
Advanced degrees
Stipends

Judging by the majority of teachers' comments, the quality of local staff development has steadily improved. Written comments accompanying teacher surveys suggest that locally-organized staff development is more likely now than in the past to (1) focus on curriculum linked to pedagogy, (2) respect teachers' professional experience, and (3) show sophistication in its design and execution.

Although the difference is not large, district staff development fares better in teachers' eyes than school-based activities. Such a finding is an anomaly in light of a decade of literature celebrating the importance of school-based staff development that is "close to the classroom" and aligned with school-level priorities. What might account for this difference? In this instance, it is likely that summary ratings conceal differences in the impact of two quite different kinds of school-level activities.

Described stereotypically, one kind of activity can be summed up as the "two hours after school" event, typically on a wide array of discrete special topics such as child abuse or drug abuse. Such "information-giving" events are generally characterized by teachers as a weak form of staff development.

The second kind can be described as the school-based "special project" or other long-term activity that engages teachers as faculty groups in developing new program concepts, skills, strategies, or materials. Such intensive, goal-focused activity is more often characterized by teachers as a strong form of staff development. In a survey of site administrators, however, only 18 percent reported having long-term, intensive opportunities at their schools. Thus, teachers' responses may reflect frequent exposure to short, "one shot" presentations or to multiple sessions that are only marginally connected to teachers' pressing needs and interests.

The types of staff development that have most appeal to teachers can be determined in part from examples offered by the 460 teachers who were interviewed as part of the 30 district case studies. In those 20-minute telephone interviews, teachers were asked to describe one professional development activity since June 1986 that had been particularly "worthwhile" in light of their current or anticipated instructional assignments. Over and over, teachers described the most worthwhile staff development as having been:

- a well integrated combination of subject area knowledge and pedagogy
- days, rather than hours, in length
- scheduled partly or wholly during the salaried work day with substitutes

- accompanied by follow-up consultation, observation, materials, or additional training
- voluntary

How widespread is staff development that offers these favorable circumstances? What is the overall pattern of support or criticism that teachers direct to staff development?

Consistent Supporters and Critics Among the Teachers

Policy and program implications are made more clearly evident by highlighting the similarities and differences between teachers who were consistently favorable in their appraisals and those who were consistently disappointed. Thus, the total sample was divided into those teachers who gave consistently favorable responses to each of four items summarizing the worth and impact of district and school staff development ("supporters") and those who gave consistently negative responses to the same four items ("critics").

By this criterion, 292 teachers, or 39 percent of the total sample, qualified as consistent supporters. Fifty-two teachers qualified as critics, making up only 7 percent of the total sample. The remaining 405 teachers, or 54 percent of the total, were either neutral in their response to these four items or were mixed in their views of district and school activities.

Consistent supporters of staff development outnumber serious critics by almost six to one. While the number of critics is small, the pattern of differences between supporters and critics is remarkably uniform. As a rule of thumb, readers should assume that a difference of 12 percentage points between supporters and critics is sufficient to achieve statistical significance.

Characteristics of Supporters and Critics. With few exceptions, individual demographic characteristics do not differentiate these two groups. In experience and formal university education, the two groups are more alike than different. Although supporters have somewhat fewer years of teaching experience, on average, both groups are dominated by teachers with more than 11 years of teaching experience. The vast majority of teachers in both groups has acquired more than 46 credit units in addition to a B.A. This is a group with extensive formal education. Approximately the same proportion of each group is enrolled in university course work, though the critics are enrolled for somewhat heavier loads and the supporters are more optimistic about the classroom impact of their course work. Supporters are slightly more likely to be elementary school teachers, and more of the critics teach in high schools. Critics are more often from suburban districts and

disproportionately more likely to be white; supporters more closely resemble the ethnic distribution of teachers statewide (about 14 percent minority). Nonetheless, the main differences between supporters and critics lie not in their individual backgrounds, their formal education, or the communities in which they work, but in their daily teaching environments and in the staff development activities they encounter.

The Teacher Constituency for Expanded Staff Development. Success breeds motivation, it appears, and disappointment dampens it. Teachers with a recent record of satisfying participation in staff development are eager for more; nearly four-fifths of supporters (78%) want more staff development. However, those who have been discouraged by past activities express little faith that the quality will improve; only one-third (34%) of critics want more. The dramatic difference between supporters and critics belies the oft-heard disclaimer: "Well, it may not help, but it won't hurt." Poorly conceived staff development activities appear to have a cumulative effect, eroding teachers' commitment.

Supporters and Critics Rate Staff Development Incentives. Both groups rank onier incentives in roughly the same way, with "access to new ideas" the most compelling incentive for both. Critics are slightly more likely to look for salary credit and more likely to want stipends for participation, a pattern that may reflect minor differences in average years' teaching experience more than it does past experience with staff development. The attractiveness of a university degree varies, predictably, with years of teaching experience. Younger teachers find degree opportunities more persuasive; with increases in new hires over the coming decade, the possibilities multiply for linking professional development to completion of an advanced degree.

Participation in University and College Course Work by Supporters and Critics. Both supporters and critics enroll for university and college course work, with critics taking somewhat heavier course loads. The two groups enroll in roughly the same kinds of courses, cohcentrating on subject matter disciplines. Supporters are less likely to be motivated by an advanced degree, more likely to say they enrolled to gain knowledge about a specific topic, and more likely to credit course work with a "great deal" of influence on their teaching.

Participation in Workshops and Conferences. Virtually all teachers (95-97%) in the larger sample participated in district- and school-level staff development activities during the prior year, but fewer than two of every three teachers were confident that the activities had improved their teaching. Less than one in six teachers "strongly agrees" that such activities have favorably affected classroom teaching.

Supporters attended more workshops and conferences, attended more of those workshops with colleagues from their own school, participated in more hours and types of follow-up, and had more confidence that the workshops had been beneficial than did the critics. Other differences between the two groups follow from these differential rates of

participation: supporters spent more days away from the classroom, earned more stipends (but not more salary credits), and studied a greater range of topics.

Schools Where Supporters and Critics Work. Prior research has revealed the importance of a school culture that is conducive to participation in staff development. Routine, daily interactions among teachers or between teachers and administrators can enhance or diminish teachers' commitment to professional development. Supporters and critics are differentiated most by their responses to items describing the school environment in which they work and the professional development opportunities that they experience as part of the salaried workday.

Supporters and critics encounter qualitatively different staff development environments in the schools where they work (Table IV-8) and thus report differently the *values attached to staff development*. Consistent supporters are more likely to receive encouragement from peers and administrators for their participation and more often receive encouragement and assistance in evaluating the classroom utility of what they have learned. Similarly, they more often report that staff development is decided by teachers and administrators working together. Finally, they more often describe faculty meetings as focusing on topics directly related to teaching.

The opportunity to *lead staff development* and to participate in staff development led by one's colleagues differentiates supporters from critics (Table IV-9). Supporters are more than twice as likely as critics to have had an opportunity to lead staff development in the last year and more than four times as likely to work in a school in which teachers routinely provide staff development for one another.

Given a choice about the *use of four release days*, supporters are more likely to seek opportunities to visit other classrooms. Other options for learning from and with colleagues rank next: workshop or conference attendance and designing lessons with colleagues. In this regard, supporters' preferences may reflect an environment and a history that lead them to believe that time spent with colleagues will be productive. Although critics, too, would value time spent visiting other classrooms, they would opt first to plan lessons on their own (52%), an option selected by only 26 percent of supporters.

Recall that less than 10 percent of all teachers report that they work in schools where *faculty meetings* are regularly (i.e., on more than half the occasions) used to focus on topics related directly to teaching. In this respect, supporters and critics work in dramatically different environments. Supporters were three times more likely than critics to work in a school where at least one-quarter of the meetings were devoted to teaching topics.

Despite similar inclinations to participate in classroom observation, supporters and critics differ markedly in their perceived *opportunity to observe*, in the form that

observation takes when it does occur, and in the impact that teachers attribute to observation (Table IV-10). Supporters are almost twice as likely to believe they have the opportunity to observe and are more likely to take advantage of it when offered. They are more likely than critics to observe or be observed four or more times during the year (the point, it seems, at which impact begins to be felt). They are more likely to follow observation with discussion, a major contributor to impact.

Table IV-8 The School Climate Supporting Staff Development

	All teachers (N=749)	Supporters (N=292)	Critics (N=52)
Teachers work in a school where:			
Peers encourage staff development	56.0%	69.0%	25.5%
Administrators encourage staff development	68.0	79.1	38.8
Teachers "often" expected to use what they learn	37.0	55.2	10.0
Administrators "often" support teachers in using staff development	36.1	53.1	18.0
Teachers and administrators decide staff development together "often"	30.5	47.1	5.8
More than 25% of faculty meetings on topics of teaching	21.0	25.0	8.1

Table IV-9 Teachers as Leaders of Staff Development

	Total Sample (N=749)	Supporters (N=292)	Critics (N=52)
Teachers often provide staff development in your school	17.4%	25.1%	5.8%
You may have had an opportunity to lead staff development in past year	25.2	35.4	17.3
You have been a mentor	14.7	16.2	11.5
You have led staff development in your own school	25.20	22.6	5.8
You have attended workshop on teacher leadership	14.95	17.1	1.9

Table IV-10 Peer Observation as Staff Development

	All Teachers (N=749)	Supporters (N=292)	Critics (N=52)
Teachers have the opportunity to observe	57.4%	66.9%	38.5%
Visiting other classrooms a preferred use of release time	55.0	59.9	48.1
Have observed or been observed by peers in last year			
at least once	45.2	54.5	34.6
four or more times	14.7	18.2	7.7
Observation followed by discussion			
at least once	43.0	52.1	34.6
four or more times	9.1	13.4	1.9
Observed by peers as follow-up to workshop	14.2	18.5	1.9
Observed peers as follow-up to workshop	11.0	13.7	5.8
Observation improved teaching for those who did it	68.8	75.5	16.7

TEACHERS' INFLUENCE OVER STAFF DEVELOPMENT DECISION MAKING

Staff development decision making has attracted attention for two reasons. First, teachers have sought greater influence over choices of content and format as a means of ensuring a greater fit among staff development design, classroom demands, and professional experience. Second, district-sponsored staff development has been criticized for fragmented decision making that operates at too great a distance from the classroom and that remains uncoordinated among offices within a district.

The study addressed staff development decision making in four ways. First, district administrators and staff developers in the 30 case study districts were asked to describe the decision making process that led to each of the recorded activities. Second, teachers and administrators surveyed by mail were asked to describe their perceptions of the current role of teachers and administrators in making staff development decisions. Third, district administrators surveyed by mail were asked to indicate whether staff development choices were subject to the advice or approval of a district wide committee. Finally, union representatives were interviewed in 24 of the case study sites to determine the union's role in providing or influencing staff development.

Decision-Making Patterns and Structures

Administrators have more influence than teachers over staff development. In one fashion or another, teachers may be consulted about staff development preferences, but they are far less likely to be involved in the detailed decision making. Despite the existence of district committees, individual activities are most often decided by staff development leaders typically assigned to district office.

At the school level, teachers and administrators both state a strong preference for joint decision making; administrators believe more often than teachers that joint decision making now prevails. One explanation for the discrepancy in teachers' and administrators' views is that administrators work with a small number of teachers to arrive at a decision; from the administrators' point of view, they in fact decide "with teachers," although large numbers of teachers may not be privy to such deliberations and may thus feel they have little part in the decisions.

At the district level, four-fifths of the districts report having some mechanism for deciding or proposing staff development priorities. More than one-third have a separate staff development committee—some with considerable influence on district decisions and with good teacher credibility. About one-quarter of the districts make staff development decision making part of a district curriculum committee's responsibilities.

Union Influence

Teachers organizations have played a prominent role in state-level deliberations over staff development. At the district level, however, they are less visible and less of a force in policy and program decisions.

Bargained contracts affect staff development directly by specifying days and hours of employment and the conditions under which individuals may be granted leaves or may apply earned credit for salary advancement. District administrators surveyed by mail described the nature of contract language governing time, opportunities, compensation, and the link between staff development and teacher evaluation. Although contracts in more than half of the districts provided for sabbaticals or other leaves and specified staff development credit for salary advancement, other explicit conditions were far less common (Table IV-11). With the exception of participation on mentor selection committees, district administrators were largely unaware of any way in which the unions either provided staff development directly or influenced the design of district-sponsored activity.

Few contracts (4, or 17 percent, of the 24 cases) contain explicit reference to the 150-hour professional growth requirement; two districts (8%) added a local requirement that teachers complete a specified number of units every three or four years as a condition of advancement on the salary schedule. Some contracts (25%) provide for regular paid staff development days, and a small number (2 or 8%) offer a "credential incentive program" in which the district pays tuition and fees for teachers who earn additional credentials in district-determined areas of need.

Union representatives' reports closely matched district administrators' perceptions. In two-thirds of the cases, the union provided no staff development; those that did tended to restrict their activities to topics of specific interest to union members such as the 150-hour requirement, teachers' rights, and financial planning. Program examples of the sort represented by the AFT's national Teachers Research Linker Project (piloted in California) or by the NEA's Mastery in Learning Project (with two sites in California) did not arise in the sample districts. Teacher organizations as providers and promoters of staff development are not a prominent part of the prevailing staff development picture in local districts.

Less than half of the local bargaining agents had submitted any explicit proposals regarding staff development during the last three years. Such proposals most often were attempts to provide for greater teacher involvement in staff development decision making and additional time for staff development activity. In most cases, these proposals did not become part of the bargained contract.

Table IV-11 What Role Does the Local Bargaining Agent Play in District Staff Development?

*Report of district superintendents surveyed by mail
(N=265)*

	Yes 1	No 2	Uncertain 3
Is there contract language governing:			
Teachers' time for staff development	22.4	72.4	5.2
Voluntary versus mandatory participation	25.3	69.9	4.8
Link between staff development and teacher evaluation	15.5	78.5	6.0
Compensation for participation	21.3	74.3	4.4
Credit for salary advancement	54.6	40.2	5.2
Sabbaticals or other professional development leaves	58.4	35.6	6.0
The teachers' union in the district has taken a role in staff development by:			
Negotiating contract terms governing staff development	24.1	71.1	4.9
Developing and conducting programs for teachers and/or instructional aides	6.5	89.8	3.7
Conducting needs assessments	10.6	84.9	4.5
Participating on mentor selection committee	70.0	28.8	1.2
Subsidizing conference attendance	9.4	86.5	4.1

On the whole, union leadership was favorable toward recent developments in local staff development. Individuals cited:

- the use of mentor teachers as staff developers
- district efforts to make staff development "more relevant"
- increased administrative support for staff development
- increased number and variety of offerings

However, union leadership also observed that there is rarely adequate follow-up to district-sponsored staff development, that staff development is not evaluated rigorously or regularly enough, and that there is too great a reliance on "outside experts." Several bemoaned the loss of the Classroom Teacher Instructional Incentive Program and the Teacher Education and Computer Centers.

SUMMARY OF TEACHERS' PARTICIPATION IN STAFF DEVELOPMENT

A review of teachers' participation in and appraisal of staff development suggests the following conclusions:

1. California teachers and administrators demonstrate a firm commitment to improving their own knowledge and practice.

- For every dollar spent by districts and schools directly on formal staff development activities, individual teachers contribute 60 cents in volunteer time, with no present or future compensation.
- Despite the absence of clear incentives or rewards for participation in staff development, the vast majority of teachers want more, not less, staff development opportunities. Teachers list "access to new ideas" as their number one motivation for attending conferences or workshops.
- Among teachers, consistent supporters of staff development outnumber consistent critics six to one. Consistent supporters are more likely to work in schools that make professional development an accepted part of daily work, with teachers playing a major role in deciding, planning, arranging, or leading staff development.

2 Teachers interest in high quality staff development is not currently matched by their involvement in planning, leading, or evaluating it.

- Teachers who are enthusiastic about the staff development they have received describe their school work environment as one in which teachers and administrators decide on staff development together, teachers plan and lead staff development, and teachers observe and are observed by peers in the classroom. Still, less than one-third of all classroom teachers had a leadership role in staff development during 1986. Teachers had a role in planning and leading less than 10 percent of all participant hours spent in staff development.
- Teachers' organizations play little role in shaping or delivering staff development in most districts, with the exception of the Mentor Teacher Program.

V. Administrator Participation in and Appraisal of Staff Development

California school administrators are asked to be efficient and effective corporate managers and able leaders of a professional work force.¹ The relatively recent emphasis on instructional leadership in schools is premised on the belief that administrators' actions both directly and indirectly influence the success and satisfaction students (and their teachers) achieve in the classroom. In turn, that belief is based on well documented cases of the way administrators have conducted their jobs in successful schools.

Influential administrators contribute to the quality of classroom life in large and small ways.² Indirectly, they make instruction in each classroom possible by maintaining a safe, orderly, humane environment for the work of students and teachers and by ensuring an adequate supply of materials and equipment. They "buffer" instruction by reducing intrusions during class time and by limiting extraneous demands on teachers' time. In each of their daily interactions with individuals or groups of teachers, administrators have an opportunity to bolster (or erode) teachers' commitment to their work. Time spent directly with teachers, in and out of classrooms, has been the hallmark of many principals celebrated as instructional leaders. Elementary principals are more likely to join teachers directly in planning or implementing classroom innovations; secondary principals are more likely to create opportunities for teachers to work together or to receive assistance from outside the school. In well led schools at either level, supervision and evaluation is less likely to be a trivialized, ritualized event and more likely to have technical substance and symbolic importance.

Effective management of a school or leadership of its people is arguably a complex business, especially in light of long-standing traditions that protect teachers' autonomy in the classroom. It is made more difficult by myriad variations in community expectations, student populations, and labor-management histories and by a host of other factors that complicate the tasks of classroom teaching and school administration. Further, the skills that enable former teachers to succeed in administrators' complex undertakings are not the ones they most typically acquire during a career in the classroom. Teachers have been informally "groomed" for administrative roles (Baltzell and Dentler 1982), but the forms of apprenticeship are varied indeed. The structure of leadership in most schools has been relatively narrow; positions pegged as leadership opportunities (such as department head)

¹ Reconciling the demands of a bureaucratic organization and a professionalized workforce is a familiar topic in business and social science literature (Benveniste 1987). A position in the private sector equivalent to that of school site administrator might be a manager in a research and development division of Hewlett Packard, whose management responsibilities include the support and supervision of professional engineers

² Literature on the principalship, and specifically on facets of instructional leadership, has mushroomed in the past decade. Much of the impetus to examine the principalship can be traced to studies of school change during the 1970s (Sarason 1971, Goodlad 1975, Berman and McLaughlin 1978). This summary relies in part on the review by Bossert et al. (1981), and on selected studies of instructional leadership (Greenfield 1987).

have tended neither to permit nor to demand much of the teachers who have held them.³ In any case, there has been more consistency in the rhetoric than in the reality surrounding preparation for instructional leadership.

Staff development for California site administrators is heavily influenced by the prevailing imagery of instructional leadership. (Simply examine the number of conferences, workshops, or courses that include "leadership" or "instructional leadership" in their titles.) A major initiative of the Association of California School Administrators, for example, is called Project Leadership; the California School Leadership Academy explicitly orients its curriculum to "increasing your leverage as an instructional leader." More than three-quarters of site administrators responding to this study's staff development survey had attended workshops or conferences on "instructional leadership" during a one-year period.

The message of instructional leadership is being delivered to a group already long familiar with the exigencies of school site management. Three-quarters of the administrators responding to the mail survey had more than 6 years' experience; more than one-fifth had more than 20 years' experience; only seven percent were newcomers, with less than 2 years' experience. Many of these administrators have experienced substantial shifts in the student populations of their schools, the nature and extent of the school program (both curricular and extracurricular), and the relationship between teachers and administrators. Instructional leadership, whatever it turns out to mean, must accommodate rapid change and complex circumstances.

California's 16,000 administrators comprise about eight percent of the certificated employees, and account for about the same proportion of staff development resources. (Inferring from administrators' survey responses and from local descriptions of staff development activity, administrators also benefit from additional resources when they become involved in staff development activities with teachers).

This section summarizes the staff development opportunities typically available to site administrators through taxpayer-supported initiatives. These include mainly activities at the district or county level and activities provided under the auspices of the California School Leadership Academy. The section relies upon data collected in sample case-study districts, plus the responses of 117 of the 200 site administrators who were sampled randomly and surveyed by mail.⁴

³ There are, predictably, wide variations within and among districts. Some California districts have invested substantial resources in promoting and supporting school-level leadership by teachers and have made such leadership experiences a virtual prerequisite to administrative positions (see Little, Long, and Gilkey-Amado 1986).

⁴ The administrator survey had a return rate of 60 percent, making the generalizability of the sample somewhat uncertain. In its ethnic distribution, years of experience, school size and type, and other demographic variables, the sample appears to mirror closely the population of the state's administrators. However, there is no way of knowing how closely the sample reflects the wider population's experience with or attitude toward staff development.

PUBLIC INVESTMENT IN ADMINISTRATORS' STAFF DEVELOPMENT

The professional development opportunities for California's administrators are more often found outside the district than within (Table V-1). All but the very smallest districts provide at least one staff development activity for administrators, but few support a regular sequence of inservice opportunities. Exceptions are the state's largest districts, which (by comparison) have invested relatively heavily in training and supporting site administrators. In San Diego, the Management Development Conference series offers six or more full days of workshops to administrators; in Los Angeles, the Administrator Career Development Program (administered by the Human Resources Development Branch) is a centerpiece of a larger human resources development strategy. In smaller districts, administrator retreats (held during summer months) have provided a mechanism for combining professional development and program planning. Still, less than half of the districts surveyed by mail (44%) said they offer regularly scheduled inservice for administrators apart from routine management meetings.

A recurrent theme of the school leadership literature centers on the symbolic and instrumental importance of administrators' involvement in staff development—particularly that associated with larger school improvement ventures. Most district administrators (86%) said they either require or encourage site administrators to attend inservice training with teachers; however, judging from administrators' own responses and from interviews with staff development leaders, the rate of attendance appears low. Less than half of the surveyed site administrators (42.6%) said they were expected by their districts to attend staff development activities with teachers. Even then, administrators typically joined teachers in two or fewer staff development activities.

Districts invest in administrators' development in part by subsidizing their participation in activities elsewhere. More than four-fifths of the surveyed districts support participation in events such as those sponsored by the Association of California School Administrators (ACSA) or the Association for Supervision and Curriculum Development (ASCD). More than half of the districts (57%) are prepared to support administrators' participation in the three-year training conducted by the California School Leadership Academy.

Table V-1 What Staff Development Has Been Available to Improve Classroom Teaching for Administrators?

*Report of district superintendents surveyed by mail
(N=265)*

No district-sponsored activity	16.2%
District approved administrators' participation in a regional Administrator Training Center (ATC) program	56.6%
District subsidized attendance at conferences (e.g., ACSA, ASCD)	86.4%
District required or strongly encouraged participation by administrators in teacher inservice	86.4%
District provided specific inservice program for new administrators	30.9%
District provided regularly scheduled inservice for all administrators, apart from management meetings	44.2%
District provided inservice for administrator-teacher teams from school sites	40.0%

Districts spend an average of approximately \$1,400 per administrator for locally administered or subsidized professional development activity during a one-year period (Table V-2); the total taxpayer investment from all sources averages \$1,800 per administrator (Table II-1). District-sponsored staff development for administrators is differentiated from teacher staff development by a higher per-participant-hour expenditure for outside presenters and a higher expenditure for facilities, travel, and other miscellaneous costs. Administrator staff development during the instructional day occasionally has a substitute cost attached, especially in elementary schools, where an experienced teacher will leave his or her own classroom in the hands of a substitute to assume responsibility for the school while the principal is away.

Table V-2 Estimated Taxpayer and Participant Investment for District and School Organized Administrator Staff Development

*Based on Interviews with 280 Staff Development Administrators and
97 School Leaders in the 30-district sample*

	Cost Per ADA	Cost per Participant Hour	Cost Per Administrator	Percentage of Total SD Costs	Percentage of Classroom Costs
Substitutes	\$0.64	\$1.99	\$179.14	10.59%	0.02%
External Providers	\$1.72	\$5.35	\$482.18	28.50%	0.04%
Miscellaneous and Facilities	\$1.09	\$3.37	\$304.42	17.99%	0.03%
Stipends	\$0.26	\$0.80	\$72.18	4.27%	0.01%
Leaders' Time for Planning and Delivery	\$1.29	\$4.00	\$360.79	21.32%	0.03%
LEVEL I SUB-TOTAL: Current Monetary Investment by Taxpayers	\$4.99	\$15.51	\$1,398.71	82.67%	0.12%
Present Value of Future Salary Increases Resulting From Additional Semester Units	\$0.00	\$0.00	\$0.00	0.00%	0.00%
LEVEL II SUB-TOTAL: Current and Future Investment	\$4.99	\$15.51	\$1,398.71	82.67%	0.12%
Value of Reallocated Administrative Time	\$0.00	\$0.00	\$0.00	0.00%	0.00%
LEVEL III SUBTOTAL: Total Investment by Taxpayers	\$4.99	\$15.51	\$1,398.71	82.67%	0.12%
Investment by Participants	\$1.05	\$3.25	\$293.24	17.33%	0.03%
LEVEL IV TOTAL: Combined Investment by Taxpayers and Participants	\$6.04	\$18.76	\$1,691.96	100.00%	0.15%

Like teachers, administrators contribute to the overall investment in staff development by volunteering about one hour for every five supported by public dollars. By comparison to investments of time, out-of-pocket expenses were modest; fewer than one-quarter of the administrators (23%) spent more than \$100 on conference registration and related expenses during a one-year period. About 15 percent incurred expenses associated with university course work.

Workshops and conferences are the dominant mode of staff development for administrators, as for teachers. More than 90 percent of the administrators surveyed had attended at least one workshop or conference during the one-year period of the study. More than four-fifths had attended three or more, and one-fifth had attended more than six. Two-thirds of the administrators attending conferences had been away from their schools for four or more days during the school year. In large numbers, administrators are attending workshops and conferences that will equip them for organizational leadership and management, including teacher supervision and evaluation. About half (53%) have attended sessions on teaching methods. To the extent that administrators receive staff development on specific topics of curriculum and instruction, they are likely to do so in district- or county-sponsored activities. In about one-quarter of the participant hours attributed to administrator training in the sample districts, administrators studied recommended classroom instructional methods and classroom management; less than 10 percent of their participant hours in staff development engaged them on specific curriculum topics.

Follow-up consultation and assistance is relatively rare for administrators, as for teachers. About one-quarter of all local staff development for administrators in the case-study districts required school-based follow-up, another quarter made it optional, and nearly half provided none. When asked what they do as follow-up to workshops and conferences, site administrators were most likely to plan jointly with other administrators (57%), or to observe teachers (46%). Less than one-fifth (18.7%) reported having consulted with or having been observed by the leaders of staff development activities (a form of "coaching").

Compared to the volume of conference attendance, involvement in university course work is low. Nearly 40 percent of teachers were enrolled in course work during a one year period; less than 15 percent of administrators were similarly enrolled. (Differences in the length of the official workday for teachers and administrators, especially in secondary schools, may account for some of the difference in participation rate. Administrators may be less able than teachers to meet the time requirements of a university class schedule). Of the administrators who are enrolled, nearly two-thirds were taking one or two courses, and half accumulated four or fewer units. Most are working toward a credential or advanced degree. When administrators enroll in course work, they select courses that closely mirror their other professional development choices. Courses on leadership or supervision and evaluation are those most often taken.

Administrators' Assessments of the Quality of Their Staff Development

Administrators, like teachers, value professional development opportunities. Two-thirds would welcome more activities than are now available, and the vast majority give high ratings to activities now available inside and outside the district. Eighty-two percent responded favorably to the quality of district opportunities, and 79 percent found activities

outside the district to be worth their time. Although relatively few administrators are enrolled in university course work, most find it rewarding; 40 percent say their courses have had "a great deal" of impact; nearly all others say courses have had at least some effect. Fewer than 1 in 10 administrators (6.7%) are thorough skeptics, doubtful that the staff development they have received has had any impact.

Nearly three-quarters of administrators (72.4%) say they work in districts where administrators' professional development is strongly encouraged. Slightly over 10 percent, however, believe that their districts fail to encourage them or even actively discourage their participation in staff development. Like teachers, administrators look to "access to new ideas" as the number one incentive to participate in staff development (85%). Material incentives (advanced degrees, stipends) are of less interest.

Most educators and educational policy makers appear to subscribe to the belief that the principal is a crucial key to an effective school. The weight of the available research is consistent with such a belief. With that belief at the heart of a staff development strategy for administrators, two observations stand out:

First, the prevailing pattern of activities maintains a long tradition of separating the training of administrators from the training of teachers. For many management facets of an administrator's job, the traditions are perhaps sensible. If the object is the "well-led school," however, one would expect to see a greater share of resources devoted to preparing administrators and teachers together.

Second, this study discovered few instances of professional development that prepared school boards, superintendents, or other district administrators to do an effective job of supporting site administrators in their work with teachers, or to do a thoughtful job of assessing principals on their ability to support and evaluate a faculty. Although schools have been singled out as the most productive site for change and improvement, schools remain part of a larger system. The district is the policy making unit; the values, policies, and practices established by school boards and superintendents will have a large bearing on the attitudes that principals hold and on the choices they make that in turn affect teachers and students.

VI. Policy Issues and Alternatives

The state's interest in the quality of teachers and administrators is expressed in three ways. First, the state regulates membership in the teaching profession and in the administrative ranks through certification requirements and, following certification, through policies governing job security (tenure) or personnel evaluation. Second, the state establishes obligations for continuing education and supplies funds for activities that satisfy those obligations; the professional growth requirement, specially designated staff development funds, and the general fund apportionment to districts all provide incentives and support for continuing education. Finally, the state supports recruitment and retention of capable educators to the extent that it assists districts to establish competitive salary schedules, attractive working conditions, and career options within education.

In the discussion that follows, we examine policy issues and alternatives related to the second of the state's three strategies for affecting the quality of teaching and learning: formal support for staff development. The underlying thesis is that Californians should view education staff development as an important investment in human resources which, if pursued in a systematic, sustained, coherent manner, could return long-run benefits to students and the state generally.

Human resources development policy has at least two purposes, both of which are directed at increasing individual and organizational productivity. One is to enhance the knowledge, skills, and motivation of individual employees. The other is to ensure that employees are knowledgeable about and committed to the goals of the organization in which they work. Such purposes cannot be fully satisfied by the hiring process, no matter how well prepared the candidates. Further, these purposes cannot be achieved by one-time "fixes." Where they exist in education and industry, human resource development plans reflect the need for continued, systemic, coherent attention to both the training needs of individual employees and the employing organization.

THE EVOLUTION OF STAFF DEVELOPMENT AS A STATE CONCERN

Staff development in education formerly rested almost exclusively with individual educators and the local districts that employed them. Today, it is increasingly a matter for state-level consideration.

Prior to the advent of large-scale federally sponsored categorical aid programs in the mid 1960s, little was heard about formal programs of staff development in education. A sweeping national campaign of inclusion initiated in the mid 1960s rendered teacher retraining a high priority. Low income, non-English-speaking, handicapped, and migrant

students were now being brought under the mantle of public schools, and many teachers were inexperienced in instructing such youngsters. Additionally, court-ordered and voluntary racial desegregation programs in thousands of school districts underscored the necessity of exposing teachers to new ideas about instruction and insights about cultures other than their own. Federal programs recognized training deficiencies among teachers, and local school districts began to take advantage of federal funds to offer their teaching staff added preparation.

Throughout the 1960s and 1970s, local school districts gradually assumed the major responsibility for providing staff development services. The absence of a statewide human resources development strategy was not particularly troublesome because education had not yet assumed intense statewide significance. Overlapping responsibility for inservice education among public and private universities, county offices of education, local school districts, and private-sector entrepreneurs was simply a fact. Enabling individual teachers to select from a market-driven menu of inservice course offerings was a natural outgrowth of the varied categorical programs. With the development of collective bargaining, salary schedule credit for added numbers of courses and district inservice preparation programs became a fixed point of reference in the constellation of local district collective bargaining activities.

The context for much of this local decision making has now changed. *On many important dimensions, California now has a state system of public schooling.* Judicial findings that a student's education should not be based upon the property wealth of his or her local district, combined with passage of Proposition 13 in 1978, resulted in increased centralization of school funding at the state level. Annual statewide spending for public schools has risen to more than \$20 billion, and the state itself is the overwhelming senior partner in the financial side of this undertaking. It is also the case that elected officials increasingly look to the schools to assist the state in creating and sustaining a productive economy and civil society. Thus, the state determines the level of available school revenues, specifies high school graduation requirements, provides direction on curriculum content for students and teachers, and measures student outcomes through a large scale assessment program and performance review process.

Despite the increasing prominence of the state, the individual student and teacher are the ultimate implementors and consumers of education policy and, as such, remain at the heart of the process. Similarly, schools, districts and intermediate organizations and institutions play a vital role in ensuring the effective delivery of education to California's more than 4 million students. Within this context, staff development policy questions assume an enlarged significance.

ELEMENTS OF A STATE STAFF DEVELOPMENT POLICY

A comprehensive state vision and policy orientation for staff development should include elements such as (1) principles to guide funding decisions, (2) purposes that deserve or require support from the state, (3) governance structures and decision points based upon purpose, (4) providers of services based upon expertise, (5) effective incentives, and (6) mechanisms of quality assurance and effectiveness. The following discussion is intended to assist state and local policy makers and public school professionals in improving current arrangements and arriving at a new vision of human resource development for educators.

Guiding Principles Derived from Research and Experience

One of this study's fundamental conclusions is that present-day, state-sponsored staff development programs have grown by accretion and, for the most part, are unexamined as to their overall goals, modes of delivery, scale of investment, and outcomes. The following principles and guidelines address this condition and apply to the development of a statewide strategic vision for K-12 staff development.

1. *Importance.* The major state investment in the quality of education is in the salary and other support provided to educators. By supporting formal staff development, the state ensures continued return on its personnel investment. That is, staff development is not a luxury but an essential element of state support for education. Viewed from this perspective, an investment of less than two percent in categorical staff development funding is modest.

2. *Link to Student Benefit.* The ultimate test of public supported staff development activities is the performance of pupils. Intermediate goals, such as improvements in teachers' knowledge, skill, or commitment, should be plausibly related to benefits for students. The requirement for demonstrating the relationship between investment and benefit can be satisfied by standards for proposals, annual plans, program evaluations, and policy-related research. At the local level, justification for content and form of staff development might rest more surely on proposed benefits to students.

3. *Multiple Purposes.* Staff development is not an end in itself; it occurs in the service of other important educational purposes. A comprehensive state strategy will acknowledge the multiple goals that staff development serves and will link funding to an assessment of the "big picture": what is the goal, how is it related to other goals, by what other means is it being pursued, and what priority does it deserve at this time?

4. *Locus of Control.* The burden of improvement is felt most at the classroom and school level; the predisposition in staff development funding should be in favor of discretionary decision making close to the classroom. The choice to place decision making responsibility at levels above the school should be determined by the purpose for the staff development and appropriate economies of scale for its delivery. Locus of control should reflect the distinctive interests and needs of individual teachers, schools, districts, and the state.

5. *Developmental Capital Supplied by the State.* Such capital should support the evolution of staff development content and strategy that taps the best of current research and practice and that makes it available in a cost-effective manner. Free-market forces are unlikely to anticipate staff development needs fully; therefore, public investment in developing selected staff development offerings will be needed. Universities, professional associations, and regional agencies may be in a position to undertake the developmental work that is beyond the capacity of most individual districts. Appropriate levels of competition among a variety of staff development providers is desirable.

6. *Access to High Quality Staff Development Services.* Access to services should not be unfairly determined by a school district's geographic location. Regional agencies, intermediate between the state and the local school district, are likely to be useful in planning for staff development, undertaking developmental work, maintaining rigorous standards, and taking advantage of economies of scale in acquiring and delivering services.

7. *Evaluation.* Staff development programs should be operated in a manner consistent with a continuum of good practices ranging from appropriate program design, through classroom reinforcement for the individual participant, to eventual program evaluation. Program evaluation considerations should be included from the design stage forward in order to build a body of knowledge about the cost effectiveness of alternative staff development activities.

These principles permit a state orientation that consolidates staff development with other crucial educational aims, achieves a level of integration, consistency, and rigor now absent, yet preserves flexibility where needed.

Education poses a particularly complex setting for staff development. Educators view themselves as professionals, implying a high degree of personal and collegial responsibility for continued improvement in knowledge and skill. On the other hand, most are employed in bureaucratic settings characterized by hierarchical decision making, where organizational priorities and norms are most frequently established above the classroom level. Thus, the challenge is to define a staff development strategy which appropriately reconciles the priorities of both the individual professional and the organization in which he or she works. These tensions are made even more complex by the presence of multiple

levels of authority in education. Depending upon the issue and one's perspective, the state, the school district, and the school can all be seen as the employing organization.

Multiple Goals for Staff Development

Staff development achieves its impact on students by affecting the knowledge, skill, confidence, and commitments of teachers and administrators and by helping to alter the institutions in which they work. The state can examine its portfolio of funded initiatives with an eye toward judging the probable contribution that each component makes to the quality of teaching, learning, and school management. As a group, funded initiatives might be expected to reflect attention to all of the following goal areas.

Subject Matter Knowledge. A teacher's choice about *what* to teach is a major determinant of quality in the classroom. The breadth and depth of subject matter treatment in the classroom is contingent on both the preparation of individual teachers and on the preparation of faculty groups (departments, grade levels) to make appropriate judgments about content emphases, materials, and the like. Staff development has typically concentrated on the former; it might fruitfully expand attention to the latter.

Pedagogical Sophistication. Teaching is much more difficult than it often appears to those whose only acquaintance with it has been as student or perhaps as parent, working one-on-one. For example, knowing how to solve a linear equation is quite a different matter from knowing how to help 30 adolescents learn to solve them, or maintaining an environment orderly enough to try. Classroom management, techniques for instructional planning and delivery, subject-specific pedagogy, and student evaluation all are areas in which teachers should acquire basic understandings during their university preparation and first few years of teaching. Staff development contributes to teachers' success by increasing the pace at which beginning teachers move beyond mere survival. Staff development has been heavily weighted toward "generic pedagogy"; it might fruitfully expand its attention to subject-matter pedagogy, including pedagogy appropriate to interdisciplinary study.

Organizational Capacity and Program Quality. Schools appear to thrive when teachers are prepared to be effective not only in the classroom but also as members of a school-level or districtwide faculty. The quality of student learning is arguably linked to the ability of an organization to establish values conducive to learning and to act on those values in coordinated and consistent ways. Staff development has been marketed largely to individuals; even many "school-based" offerings are simply small versions of district workshops in which individuals attend as autonomous individuals. Activities that have as their object the improvement of the organization range from "information" sessions that acquaint persons with rules to intense school improvement initiatives that strengthen

teachers' and administrators' capacities to make sound program choices. An effective state strategy might profitably foster more of the latter.

Professional Status and Commitments. The recent move to further professionalize the teaching occupation has implications for state-supported professional staff development. Teachers have been urged to assume greater responsibilities in inducting new teachers, assisting one another with classroom innovations, or sharing their accumulated knowledge and experience. They are given credibility in these roles by their classroom experience, but in many crucial ways classroom experience alone is inadequate preparation for cooperation with colleagues. A small share of the staff development investment can be productively devoted to preparing teachers for effective contributions to the district and the profession; as one consequence, a far greater share of the staff development dollar might be spent on staff development activities planned and led by teachers.

Decision Points: Who Controls What Staff Development?

Listed below is a continuum of decision makers, each of whom has a legitimate role in defining and controlling the contents of staff development.

The Individual Teacher or Administrator. The needs and interests of individual educators cannot fully be satisfied by the collective priorities established by a school faculty or district staff development programs. Individuals have a stake in preserving their latitude to make individual choices and to receive support or compensation for doing so. Individuals also have a stake in the quality and relevance of activities undertaken by a group or organization, using public resources and requiring an investment of teacher time and energy.

Individuals now make independent choices regarding staff development when they enroll in university courses, or when they elect some from among many available conferences or workshops. Presumably, they exert influence on larger program choices when they participate in needs assessments or in school-site planning. However, teachers and site administrators (the most common "learners") are underrepresented in the leadership of formal staff development. With the exception of their college or university graduate preparation, teachers' and administrators' personal interests also receive little direct public support.

From a state perspective, public funds now subsidize individual choices through the operation of the salary schedule and through support for graduate instruction in public universities. Assuming that those forms of support will remain stable for the indefinite future, the state might elect policy options that expand or limit individuals' decision making power. Unrestricted minigrants honor teachers' preferences while conveying the

expectation that money will be used directly for the improvement of instruction; restricted minigrants bind the projects more clearly to school- or district-level priorities or place other obligations on the recipients. Vouchers for purchase of staff development services leave teachers free to "vote with their feet," but serve to perpetuate the fragmented menu of activities with only uncertain connection to instructional assignments. A budget of discretionary release time granted to individuals or to groups of teachers retains decision making in the hands of the consumer but increases the probability that teachers might choose to spend the time working directly with colleagues.

Each of these options assumes the teacher to be the primary decision-making unit in the selection of staff development activities. It makes no assumptions about providers of staff development services or the possibility of requirements placed upon teachers regarding the nature of staff development. Such an arrangement neither mandates nor precludes teachers having to meet a minimum staff development requirement within a statutorily or contractually required period. Neither does it specify or preclude individual teachers being required to select all or a part of their staff development activities in keeping with a district- or state-specified objective. Finally, these options generally assume that the right to decide on staff development is vested equally in all teachers. An alternative, exemplified by the Mentor Teacher and Classroom Teacher Instructional Improvement Grants programs, is to commit special resources to those teachers who in some manner have qualified for them. Such a model is strengthened both instrumentally and politically by mechanisms that ensure that the activities of the few will yield benefits for many.

The School. The ideas, insights, or materials that compose the content of staff development come to life (or not) in the daily work of schools and classrooms. Schools are the operating component of education, where state policies are eventually translated by professional educators into services for students.

Individual schools must be assumed as the primary unit around which to build a strategic vision of staff development. Latitude for decision making and access to discretionary funds might reasonably come to schools in larger share than they now do in most districts. The planning and evaluation processes associated with the School Improvement Program (SIP) and School Site Staff Development (AB 551) are well grounded in research and experience. Though uneven in practice, they nonetheless continue to serve as reasonable models. A more uniform standard might be achieved.

The District as Policy Unit. District policies affect the quality and impact of staff development. They communicate the value attached to professional development by the resources they invest and by the policies they make governing release time, approved staff development content, staff development budgets and staffing at the school level or central office, out-of-district travel, and links between staff development and personnel evaluation. The governing board and the superintendent are the sources of policies and practices that promote or discourage effective staff development.

In many districts, centralized policy-making authority has been matched by centralized control over staff development funds, staff, and activities. Productive alternatives might be developed by adopting a stance described as "centralized troublemaking and decentralized problem solving."¹

State Agencies. The assumption here is that public schooling is a plenary function of the state, and, thus, state interests must also be served by staff development activities. State legislative and executive branch officials decide what staff development activities are necessary to serve these interests and, through arrangements with providers and use of appropriate incentives, should see that such ends are met. For instance, in SB 813, the legislature directed the State Board of Education to adopt model curriculum standards and required local school districts to appraise their curriculum every three years against those standards. The board also adopts textbooks and frameworks consistent with the contents of the standards; the California Assessment Program (CAP) uses the standards in the development of its measures of student achievement. It thus seems only appropriate that the state provide teachers and administrators with the wherewithall to be knowledgeable about the standards and the contents of items such as the model curriculum.

Professional Organizations and Associations. Educators, and teachers in particular, are increasingly identifying with norms of professionalism, where the profession itself organizes to help induct, support, and police its membership. Through professional organizations, teachers and administrators have access to staff development which may not be a local priority but which may enhance an individual's capacity for good teaching or becoming a school-site leader.

The assumption here is that teachers cooperating through their professional organizations, and administrators operating similarly, should decide what staff development activities are in the profession's, and presumably schools', interest and arrange for the necessary provision of services.

Multiple purposes and decision points representing varied constituencies compose the demand side for staff development. What about the supply side? Who should provide staff development and what are the principles for its provision? What incentives should be brought to bear to encourage teachers to participate in staff development activities?

Providers of Services Based Upon Expertise

The range of institutions and individuals capable of providing staff development services is remarkably broad. Moreover, an individual or organization may fall into more

¹Philip Schlechty, Gheens Professional Development Academy, Louisville Public Schools. Personal communication.

than one category of provider. Nevertheless, certain providers are better positioned to offer some services than others. It rests upon the state, the district, the school, and the individual teacher to be intelligent consumers of staff development.

Academic. This category is comprised primarily of publicly subsidized institutions of higher education.

Institutional. This is comprised of governmental agencies, local school districts, county agencies, specialized organizations (e.g., Administrator Training Centers), and endeavors directly sponsored by the State Department of Education.

Professional. Staff development services are provided by professional associations such as the Association of California School Administrators (ACSA), the California Federation of Teachers (CFT), and the California Teachers Association (CTA).

Entrepreneurial. This category consists of individuals and organizations driven by market forces. They are providers only to the degree to which clients actively seek their services. Many private institutions of higher education fit into this category, as do a variety of private-sector companies and individual consultants.

Staff Development Incentives

There are six major incentives which policy makers can utilize for inducing educators to participate in staff development. Some will prove more effective than others; those that are effective are not necessarily more costly. Also, these incentives are not necessarily mutually exclusive. Many can be combined.

1. *Personal and Professional Success and Satisfaction.* The test of professional development for teachers is greater success and satisfaction in daily work. Teachers are more likely to be attracted to staff development when they are convinced it will yield benefits in their work with students and parents.

2. *Financial Compensation.* Financial incentives are offered in two categories: current cash awards in the form of stipends or subsidies and future salary awards contingent upon accrual of added semester units of academic credit. Experienced teachers—especially those with more than 10 years' experience—look for stipends or other forms of compensation for attending formal inservice activities.

3. *Regulatory.* It is possible through statute and regulation to require staff development participation. Recently enacted state regulations regarding 150 inservice training hours for credential renewal illustrates the regulatory process. However, given

what we know about human motivation, the likelihood of incorporating staff development learning is much greater when intrinsic motivational opportunities are maximized over external regulation.

4. *Peer Pressure.* Either through formal peer review or through more subtle approval of ones peers, professionals can frequently be induced to upgrade their skills and knowledge.

5. *Performance Disclosure.* On an institutional level, collection and public distribution of information about school outcomes may induce professionals to engage in various kinds of improvement efforts, including staff development. Similarly, the increase in "public" attention to classroom performance that is attached to the mentor program and to some career ladder plans may stimulate individuals to improve their work.

6. *Market Forces.* Advocates of greater client choice in education, either through vouchers or choice within the public sector, often contend that under competitive arrangements faculties would be motivated to improve for fear of losing their customer base.

Policy makers should consider three key considerations in designing incentives for staff development:

First, given that access to new ideas is the chief motivator for staff development participation, teachers need time and resources both to design and participate in staff development within the salaried workday, without jeopardizing student learning. Supporters and critics of current staff development would value time spent visiting other classrooms and developing new lessons either alone or with others.

The quality of staff development is constrained by the sheer number of demands on teacher time. As long as the salaried work day and work year provide relatively little out-of-classroom time, the odds in favor of effective staff development are diminished. The system's large commitment to instructional time might be balanced by a reasonable commitment to out-of-classroom time devoted to program planning, evaluating, developing the program of study, and improving individual and organizational knowledge and skill.

Second, when teachers invest personal time and resources to complete coursework and advanced degrees, they do so with some promise of future gain. Statewide, teachers accumulated an average of two semester units during the year-long study period. The annual salary yield attached to a single unit is less than \$90; the downstream costs of credits earned over the life of the teacher from one additional semester unit is approximately \$1,400, which when aggregated across all teachers results in a \$600 million annual investment. Although the cost may appear high in dollar terms, the fact remains that the return is quite small for individual teachers, and their salary increases are not "reallocable"

in the sense typically applied to categorical monies. Rather, the issue is whether the salary advances will be linked to professional development in a way that provides clear incentives for improving performance.

Third, the state and local school districts should consider a portfolio of incentives for teacher participation in staff development. A well conceived incentive package should be part of an overall staff development plan. Districts need to provide teachers with "access to new ideas," simultaneously recognizing that not all teachers want to assume leadership or "mentoring" responsibilities, nor do they wish to attend college and university courses.

Plan for Staff Development in California: An Illustrative Model

There is no "one best system" for providing staff development. Model staff development programs do not arrive on the education landscape fully functioning. They require a purposeful vision, leadership, sustained resources, and sufficient time to develop a mode of operation, gain feedback, and revise procedures.

What is needed is a policy vehicle and complementary set of operational arrangements that will accommodate the multiple purposes and users of staff development activities. What structures and regulations can permit education professionals, schools, and school districts to pursue their individual and collective staff development goals and coincidentally enable the state to achieve its overarching objectives for California education? Also, whatever this system, it must be sufficiently flexible to adapt to the constantly evolving purposes of schooling. Leadership and compromise may well be needed to design such a system, and almost assuredly it will have to be redesigned periodically.

A statewide staff development plan must make efficient use of scarce resources, yet meet a wide variety of individual teacher, school, district, and institutional needs. The plan must acknowledge multiple providers of staff development but provide some mechanism for coordination among them.

Importantly, the plan must be flexible, to permit education professionals, schools, and districts to pursue both individual and collective staff development goals and coincidentally enable the state to achieve its overarching objectives for students. Whatever the system, it will have to adapt to the constantly evolving purposes of schooling. However, the flexibility of its design should not require the formation of a new agency or institution for each new policy initiative.

The following illustrative model is a point of departure for discussion.

Schools: The Primary Decision Unit. Staff development might be brought closer to the classroom and the school by an increase in discretionary funds available directly to schools and a corresponding reduction in splintered categorical funding. A school-oriented strategy is also bolstered by programs that equip teachers to teach one another; a mentor program and a structured, team-based minigrant program both contribute to such an aim.

Regional Service Capacity. It is unusual among school districts and even more unusual for individual schools to possess sufficient expertise to be able to provide all of their own inservice education needs. In almost every instance, outside ideas and talents are needed. The state will also periodically seek to stimulate changes in school and classroom practices in keeping with statewide objectives. As with districts and schools, the state does not possess all the necessary resources for providing staff development to local agencies. The result is the need for regional agencies capable of undertaking developmental activities and serving local districts, schools, and teachers, and, where appropriate, conveying the state's interests.

A variety of characteristics are important in arriving at a decision about the nature of regional staff development service units. One approach to the formation of such centers would be for the state, in cooperation with school districts and professional organizations to compile a set of characteristics for regional service providers. These would be converted into a Request for Proposals (RFP) to encourage potential providers among county offices of education, institutions of higher education, local districts, and private-sector organizations, either singularly or in consortia, to bid. The winner of the bidding would agree to provide the services to a service area for a specified contractual period, e.g., five years, after which it could be rebid.

University-Based Curriculum Institutes: A Source of Statewide Leadership. There are education staff development dimensions that outstrip the ability of regional service centers to provide. Specifically, California is sufficiently large as a state to justify pioneering efforts in curriculum development. In part this is already underway in projects such as the California School Leadership Academy, the California Writing Project, and the California Mathematics Project. California's diverse student, teacher, and administrative population could benefit from state investment in similar projects in areas such as history, science, foreign language, and computer-assisted instruction.

Action Plans and Annual Reports. Each level of the education system should have an action plan and annual report for improvement. Each school should be responsible for the development and continual renewal of a strategic action plan. This plan would be a component of an annual report, at least a popular version of which was distributed to the school's primary clients, parents and pupils, each year. Annual reports would contain descriptions of the school, its faculty, facilities, administrative and other personnel,

curriculum, and mission. Annual reports would encompass a school's self evaluation, whatever honors or awards it had received, and it would reflect student achievement on statewide measures. The strategic action plan should have a five-year time horizon. Yearly modifications would result from an annual evaluation of the individual or organization's performance relative to its goals, as well as environmental conditions such as enrollment growth or decline, faculty retirements, funding alterations, and changes in district or state curriculum focus. Annual updates to the school action plan should devote attention and resources to staff development. The staff development component should be consistent with the school's five-year development strategy and incorporate teachers' individual plans, district goals, and state goals. If the district or state were initiating a staff development effort to further one of its objectives, this should be reflected in the school's annual strategic plan update. Schools could submit their action plan, or at least appropriate components, as a proposal to the state or district, or as partial evidence of compliance in receiving funding for staff development activities.

The school's strategic plan is a mechanism for encouraging teachers and administrators to think systematically about the future of their institution, take into accounts its current strengths and weaknesses, and plan for its future. In this process, they should incorporate the goals of higher levels of governments, the preferences of their clients, and their own professional judgment. No plan suffices for all time; thus, strategic planning should be a routine and continual process for school self-improvement.

Evaluation: A Feedback Loop to Shape the Future. Regardless of the structural means eventually employed to create and sustain a statewide strategic vision for staff development, a crucial component of that vision is the inclusion of requirements for appropriate evaluation. Eventually, it is important to know the most cost effective means for providing professional educators with the services that will benefit their students.

There are presently many occasions when it is difficult or impossible to specify direct benefits to students resulting from staff development participation. Given the diversity in student knowledge, ability, and interest in learning, school and district environments, and teacher learning, it is almost impossible to attribute particular student effects to teacher participation in staff development. Consequently, evaluation often must stop short of the ultimately desired objective and settle for measures of content and process which have been documented as related to teacher learning. However, over time, the state should give attention to the development of evaluation models which can concentrate more on measuring changes in teacher performance as a result of staff development. Eventually, it may be possible to have a better understanding of the linkage between staff development, teacher performance, and student achievement.

Appendix A

District Level Staff Development Cost Models

Cost Variables

- C_{subs} = estimated cost for one hour of substitute time
 C_{sup}^{ik} = cost of stipend per teacher in the i th activity in the k th district
 C_{unit} = estimated net present value of one semester unit on the salary schedule
 C_{none} = estimated hourly participant cost to taxpayer
 C_{vol} = estimated cost to teacher of uncompensated staff development activities
 C_{prov}^{ik} = total activity cost of external providers for the i th activity in the k th district
 C_{misc}^{ik} = total activity cost of materials, equipment, food and drink, etc.
 C_{tplan} = estimated hourly cost for teachers who participated in planning/presentation
 C_{aplan} = estimated hourly cost for administrators who participated in planning/presentation
 C_{dist} = estimated yearly cost of one FTE of district level staff development leader
 C_{conf} = estimated total conference cost per day per teacher including substitute, travel, food, and fees

Time Variables

- T_{subs}^{ik} = number of substitute hours used per participant in the i th activity in the k th district
 T_{none}^{ik} = number of hours activity requires during the salaried workday but without a substitute
 T_{vol}^{ik} = number of hours activity involved outside of salaried workday with no compensation
 T_{tplan}^{ik} = total number of teacher planning/presentation hours required for the i th activity in the k th district
 T_{aplan}^{ik} = total number of administrator planning/presentation hours required for the i th activity in the k th district

Participant Variables

- P_{subs}^{ik} = number of participants for whom substitutes were used in the i th activity in the k th district
 P_{sup}^{ik} = number of participants who received stipends in the i th activity in the k th district
 P_{unit}^{ik} = number of participants receiving unit credit on the salary schedule in the i th activity in the k th district
 P_{none}^{ik} = number of participants who participated in the i th activity in the k th district during the salaried work day

- P_{ikvol}^k = number of participants who participated in the i th activity in the k th district outside of the salaried work day and did not receive stipends or unit credit
- P_{iktot}^k = total number of participants who participated in the i th activity in the k th district
 $(P_{iktot}^k = P_{iksubs}^k + P_{ikstip}^k + P_{ikunit}^k + P_{ikvol}^k)$

Miscellaneous Variables

- A_{FTE}^k = total k th district full time equivalent (FTE) administrators/teachers who plan, manage, present, or evaluate district level staff development activities
- U_{ik}^k = semester units received by a teacher in the i th activity in the k th district
- E^k = ADA in the k th district
- S_{tea}^k = staff, number of teachers in the k th district
- S_{adm}^k = staff, number of administrators in the k th district
- S_{aide}^k = staff, number of classroom aides in the k th district
- D^k = total number of conference attendance days in the k th district
- O_{rate} = estimated overhead rate to compensate for imputed rentals, telephones, utilities, insurance, etc.
- M^k = total number of staff development activities in the k th district
- M = total number districts in the cluster sample

I. The Current Investment by Taxpayers in District-Level Staff Development Activities Excluding Costs Associated with Unit Increases

District Level

- (1) {Sum over i from 1 to M^k for $\{[(P_{iksubs}^k)(C_{subs})(T_{iksubs}^k)] + [(P_{ikstip}^k)(C_{ikstip}^k)] + [(T_{ikplan}^k)(C_{iplan})] + [(T_{ikaplan}^k)(C_{aplan})]\} (1+O_{rate}) + C_{ikprov}^k + C_{ikmisc}^k + (C_{dist})(A_{FTE}^k) + (D^k)(C_{conf})$ }

Cluster Sample Level

- (2) Sum above expression for k from 1 to M

State Level Estimate

- (3) Multiply cluster sample figures by ratio of state ADA to cluster sample ADA

II. The Current and Future Monetary Investment by Taxpayers in District-Level Staff Development Activities Including Costs Associated with Semester Unit Increases

District Level

$$(4) \left\{ \text{Sum over } i \text{ from } 1 \text{ to } M^k \text{ for } \left[(P_{\text{subs}}^{ik})(C_{\text{subs}})(T_{\text{subs}}^{ik}) \right] + \left[(P_{\text{sup}}^{ik})(C_{\text{sup}}^{ik}) \right] + \left[(T_{\text{tplan}}^{ik})(C_{\text{tplan}}) \right] + \left[(T_{\text{aplan}}^{ik})(C_{\text{aplan}}) \right] \right\} (1 + O_{\text{rate}}) + C_{\text{prov}}^{ik} + C_{\text{misc}}^{ik} + (P_{\text{unit}}^{ik})(U_{\text{ik}})(C_{\text{unit}}) + (C_{\text{dist}})(A_{\text{FTE}}^i) + (D^k)(C_{\text{conf}})$$

Cluster Sample Level

(5) Sum above expression for k from 1 to M

State-Level Estimate

(6) Multiply cluster sample figures by ratio of state ADA to cluster sample ADA

III. Total Investment by Taxpayers in All District-Level Staff Development Activities

District Level

$$(7) \left\{ \text{Sum over } i \text{ from } 1 \text{ to } M^k \text{ for } \left[(P_{\text{subs}}^{ik})(C_{\text{subs}})(T_{\text{subs}}^{ik}) \right] + \left[(P_{\text{sup}}^{ik})(C_{\text{sup}}^{ik}) \right] + \left[(T_{\text{tplan}}^{ik})(C_{\text{tplan}}) \right] + \left[(T_{\text{aplan}}^{ik})(C_{\text{aplan}}) \right] \right\} (1 + O_{\text{rate}}) + C_{\text{prov}}^{ik} + C_{\text{misc}}^{ik} + (P_{\text{unit}}^{ik})(U_{\text{ik}})(C_{\text{unit}}) + (P_{\text{none}}^{ik})(U_{\text{ik}})(C_{\text{none}}) + (C_{\text{dist}})(A_{\text{FTE}}^i) + (D^k)(C_{\text{conf}})$$

Cluster Sample Level

(8) Sum above expression for k from 1 to M

State Level Estimate

(9) Multiply cluster sample figures by ratio of state ADA to cluster sample ADA

IV. Total Investment by Teachers in District Staff Development Activities

District Level

$$(10) \text{ Sum over } i \text{ from } 1 \text{ to } M^k \text{ for } (P_{\text{vol}}^{ik})(T_{\text{vol}}^{ik})(C_{\text{vol}})$$

Cluster Sample Level

(11) Sum above expression for k for 1 to M

State-Level Estimate

(12) Multiply cluster sample figures by ratio of state ADA to cluster sample ADA

Computation of Present Value of Future Salary Resulting from One Additional Semester Unit

We calculate that the present value of future salary increases resulting from one additional semester unit earned in 1986 is, on average, approximately \$1,400. Three numbers are used in this calculation:

- the increase in a teacher's yearly salary that results from one additional semester unit
- the number of years in the future for which the additional salary will be paid
- the rate of interest to be used for discounting future salary amounts

The increase in annual salary that results from one additional semester unit was computed directly from actual salary schedules in our sample districts. The number turned out to be \$84 a year. This means, for instance, that a teacher who accrues an additional 30 units, and therefore moves to the next column on the average salary schedule, will be paid an additional $\$84 \times 30 = \$2,520$ a year.

Our survey of teachers revealed that younger teachers accrued more credits than older teachers during 1986. One reason is that some of the older teachers have already accrued the maximum number of credits that can count toward salary increases. Therefore, the average credit earned this year will continue to pay off in future salary for a longer time than the average person teaching in 1986 will remain in the profession. If the average current member of the profession is expected to keep teaching for another 15 years, the number of years of future salary payoff from the average new credit would be something like 25 years. In our calculation, we used 24 years as the estimate of the average time a teacher would continue to receive a higher salary as a result of credits earned in the study year.

Conventional practice in financial accounting and economics is to discount future amounts of money because a given amount of money is worth more if it is paid in the present than if it will not be paid until some future time. In our analysis we used a real

discount rate of three percent. This means that the interest rate available to the state from alternative investments is assumed to be three percentage points higher than the annual rate of inflation. We used a real rate of interest rather than a nominal rate (which would be the real rate of interest plus the anticipated rate of inflation) because all our analysis is being done in constant 1986 dollars.

Combining these quantities in the conventional formula, we calculate that the present value of the future salary resulting from the average semester credit earned by California teachers in 1986 is approximately \$1,400 in 1986 dollars. Note that if we did not discount future salary increases, the present value would simply be the sum of the \$84 annual increases for 24 years, or \$2,016.

Table A-1. NET PRESENT VALUE OF FUTURE SALARY TABLE
AT THE CLUSTER SAMPLE MEAN OF \$84 PER UNIT

Discount Rate	3%	7%	3%	7%	3%	7%
Duration of Income Stream	Ages 23 TO 61	Ages 23 TO 61	Ages 32 TO 61	Ages 32 TO 61	Ages 42 TO 61	Ages 42 TO 61
Net Present Value	\$1,889	\$1,108	\$1,612	\$1,031	\$1,203	\$868

Income Stream	Year	Annual Increments				
	1987	\$84	\$84	\$84	\$84	\$84
	1988	\$84	\$84	\$84	\$84	\$84
	1989	\$84	\$84	\$84	\$84	\$84
	1990	\$84	\$84	\$84	\$84	\$84
	1991	\$84	\$84	\$84	\$84	\$84
	1992	\$84	\$84	\$84	\$84	\$84
	1993	\$84	\$84	\$84	\$84	\$84
	1994	\$84	\$84	\$84	\$84	\$84
	1995	\$84	\$84	\$84	\$84	\$84
	1996	\$84	\$84	\$84	\$84	\$84
	1997	\$84	\$84	\$84	\$84	\$84
	1998	\$84	\$84	\$84	\$84	\$84
	1999	\$84	\$84	\$84	\$84	\$84
	2000	\$84	\$84	\$84	\$84	\$84
	2001	\$84	\$84	\$84	\$84	\$84
	2002	\$84	\$84	\$84	\$84	\$84
	2003	\$84	\$84	\$84	\$84	\$84
	2004	\$84	\$84	\$84	\$84	\$84
	2005	\$84	\$84	\$84	\$84	\$84
	2006	\$84	\$84	\$84	\$84	\$84
	2007	\$84	\$84	\$84	\$84	
	2008	\$84	\$84	\$84	\$84	
	2009	\$84	\$84	\$84	\$84	
	2010	\$84	\$84	\$84	\$84	
	2011	\$84	\$84	\$84	\$84	
	2012	\$84	\$84	\$84	\$84	
	2013	\$84	\$84	\$84	\$84	
	2014	\$84	\$84	\$84	\$84	
	2015	\$84	\$84	\$84	\$84	
	2016	\$84	\$84			
	2017	\$84	\$84			
	2018	\$84	\$84			
	2019	\$84	\$84			
	2020	\$84	\$84			
	2021	\$84	\$84			
	2022	\$84	\$84			
	2023	\$84	\$84			
	2024	\$84	\$84			

Appendix B

Sample Selection and Data Collection Methods

The California Staff Development Policy Study employed four independent approaches for data collection and analysis:

1. State and Federal Staff Development Program Inventory
2. Cluster Sample
3. Statewide Recipient Survey
4. Statewide Provider Survey

State and Federal Staff Development Program Inventory

During 1986, California managed an extraordinary number of independent and sometimes competitive staff development efforts. For example, the Office of the Legislative Analyst reported no fewer than 20 separately funded programs. Some of these were funded entirely by state revenues, some by federal resources, and others by a mix of funding sources.

The program inventory identified, described, and categorized these state staff development efforts. For each identified program, characteristics such as purposes, evaluation criteria, resource allocation patterns, and governance procedures were described. Data were collected and analyzed from the following sources:

- interviews with State Department of Education staff
- interviews with California State University and University of California officials
- state and federal documentation including
 - > statutes
 - > administrative regulations
 - > administrative guidelines
 - > more

The program inventory effort was completed by December 1986 so that results could guide other data collection approaches, especially the cluster sample.

Cluster Sample

The heart of the study was an investigation of local policies and practices of staff development organized and programmatically relevant for state decision makers. A cluster was defined as the combination of one or more districts and associated intermediate service providers such as county offices of education and Teacher Education and Computer Centers. Within each district, data were collected from a sample of schools and teachers. The final cluster sample included

- 6 county offices and associated agencies
- 30 school districts
- 140 schools
- 460 teachers

The cluster sample approach captures a cross-section of staff development delivery patterns in California and represents the full range of California conditions: rural to urban, interior to coastal, north to south, and high to low service availability. Since schools and teachers were also sampled within each district, the distribution of staff development activities and the flow of staff development dollars could be tracked. Data were collected in the cluster sample from January through June 1987. Ultimately, 1,245 school and district staff development activities were analyzed. These activities involved 976,000 participant hours by teachers, administrator, and classroom aides.

Districts were randomly selected using a "probabilities proportionate to enrollment" procedure. The resulting self-weighted sample minimized the increase in sampling error caused by design effects. Districts were selected from 1986 California Basic Educational Data System (CBEDS) records that ordered districts by enrollment. With only three districts declining to participate in the study, the response rate exceeded 90 percent. The final sample of 30 districts closely matched statewide patterns for enrollment, student ethnicity, and expenditures per student. All district office certificated staff members who devoted more than five percent of their time to planning, evaluating, or conducting staff development were personally interviewed.

In each district, 1 to 12 schools were selected through a random sampling procedure that was stratified by school type (elementary, middle, high) and student family wealth (low, middle, and high proportions of students whose families received Aid to Families with Dependent Children). Over 95 percent of selected schools agreed to participate in the study. Principals and support personnel with staff development

responsibilities were interviewed in each sample school. Interview questions closely matched those asked of district office personnel.

In each district, 6 to 28 teachers participated in 20-30 minute telephone interviews. Teachers were randomly selected and stratified by grade level. Each interviewee received a letter and a return postcard on which they could indicate desired interview times and phone numbers. Interviews were conducted during April and May of 1987 by J.D. Franz Associates of Sacramento. The response rate was 71 percent, low for a telephone survey but sufficiently high to be valid. The age, sex, and ethnicity of teachers who completed interviews closely matched statewide figures.

Statewide Recipient Survey

A statewide mail survey of teachers and site administrators was conducted in order to test and expand cluster sample findings. These surveys were conducted during April and May of 1987 and were designed to incorporate preliminary conclusions from the cluster sample. Market Data Retrieval Corporation of Brisbane supplied a randomly selected mailing list that contained the names, addresses, and background information for 1,000 teachers and 200 principals and vice-principals. For mail surveys, format and distribution procedures determine return rates. Since high return rates were important in this endeavor, questionnaire design and distribution procedures were tailored for maximum returns. For example, each respondent received an alert postcard. One week later a complete survey packet was sent. This packet contained an explanatory letter, a questionnaire, and a stamped, return envelope. The return envelope was coded so that respondents could be identified. After two weeks, all respondents who had not already returned their questionnaire received a second complete packet. These techniques resulted in response rates of over 70 percent. Age, sex, and ethnicity of respondents closely matched statewide norms.

Statewide Provider Survey

The fourth approach, a statewide provider survey, also complemented the cluster sample, in this case by surveying all 1,026 California school districts and 58 county offices. The questionnaire allowed each service provider to describe staff development activities and to offer policy suggestions. Since response rates were low, 25 percent for districts and 52 percent for county offices, survey results received minor emphasis in the study's final report.

Appendix C

Supplemental Tables

Table C-1 Public Appropriation for Staff Development Programs for Teachers and Administrators

	State Funds Targeted for Staff Development (thousands)	Staff Development Components of Other State Programs (thousands)	Staff Development Components of Federal Programs (thousands)	Total for All Funding Sources (thousands)
<i>Investment directly in teachers</i>				\$47,500
Mentor Teacher Program	\$30,500			
CTIIP	\$17,000			
Professional Growth Requirement	\$0			
<i>Investment in school-based staff development</i>				\$26,150
AB 551	\$3,650			
School Improvement Program (SIP)		\$22,500		
<i>Investment in district-level staff development</i>				\$54,400
Mentor teacher program (other costs)	\$15,250			
AB803		\$3,000		
Chapter I			\$14,200	
Chapter 2			\$1,500	
EIA Bilingual			\$2,100	
Title VII Bilingual				
Urban Impact Aid				
State Compensatory Ed.		\$4,600		
Vocational Education		\$3,500		
SB 65 Dropout Prevention		\$500		
GATE (Gifted & Talented)				

District math/science		\$8,600	
Math/science teacher			
retraining program	\$120		
<i>Investment in regional</i>			\$22,900
<i>staff development</i>			
Teacher Education Computer			
Centers (TECC)	\$10,600		
California School Leadership			
Academy and Administrator	\$4,200		
Training Centers (ATC)			
Instructional Materials	\$0,150		
Display Centers			
Special Education Resource		\$5,000	
Network (SERN)			
SELPA		\$1,800	
Federal Teacher Centers		\$300	
Bilingual teacher training	\$830		
<i>Investment in</i>			
<i>centrally-located</i>			
<i>special services</i>			\$1,800
Software Clearinghouse	\$140		
Curriculum Implementation			
Centers (CIC)	\$1,700		
<i>Investment in</i>			
<i>university-based</i>			
<i>programs</i>			\$3,580
California State University			
CSU/SDE intersegmental			
programs			
New teacher retention	\$300		
Campus-specific subject			
area programs			
CSU sites for Cal Writing			
and Math Projects			
University of California			
Cal Writing Project	\$710		
Cal Math Project	\$1,200		
Cal Lit Project	\$430		

Cal. Humanities Project	\$100
EQUALS	\$320
CLIO	\$10
Math & computer ed	\$40
Math master tchr. project	\$50
Project SMART	\$250
Private universities	
International Studies Program	\$480
SUBTOTALS	
Total state appropriation to staff development	\$88,020
Total estimated state expenditure on staff development from other program funds	\$34,100
Total estimated federal expenditure on staff development	\$33,500
OVERALL TOTAL	\$155,610

**Table C-2 Estimated Total Costs for Teacher Staff Development Activities Within the Cluster Sample During 1986
Excluding Present Value of Semester Unit Credits**

Based on Interviews with 280 Staff Development Administrators and 97 School Leaders

	Cost Per Participant-Hour	Cost Per Teacher	Cost Per ADA	Percentage of Total Staff Development Cost	Percentage of Total Classroom Cost
Substitutes	\$2.66	\$210.31	\$9.39	12.24%	0.23%
External Providers	\$0.64	\$50.94	\$2.27	2.96%	0.05%
Miscellaneous and Facilities	\$0.44	\$34.70	\$1.55	2.02%	0.04%
Stipends	\$1.82	\$143.56	\$6.41	8.36%	0.15%
Leaders' Time for Planning and Delivery	\$5.50	\$434.19	\$19.38	25.27%	0.47%
LEVEL I SUBTOTAL: Taxpayers' Current Monetary Investment	\$11.06	\$873.70	\$39.00	50.85%	0.94%
Present Value of Future Salary Increases Resulting From Additional Semester Units	\$0.00	\$0.00	\$0.00	0.00%	0.00%
LEVEL II SUBTOTAL. Taxpayers' Current and Future Monetary Investment	\$11.06	\$873.70	\$39.00	50.85%	0.94%
Value of Reallocated Instructional Time	\$4.34	\$342.54	\$15.29	19.94%	0.37%
LEVEL III SUBTOTAL: Taxpayers' Total Investment	\$15.39	\$1,216.24	\$54.30	70.79%	1.31%
Investment by Participants	\$6.35	\$501.95	\$22.41	29.21%	0.54%
LEVEL IV GRAND TOTAL. Combined Investment by Taxpayers & Participants	\$21.75	\$1,718.20	\$76.70	100.00%	1.85%

Table C-3 Estimated Total Costs for Teacher Staff Development Activities Within the Cluster Sample During 1986 Including Present Value of Semester Unit Credits

Based on Interviews with 280 Staff Development Administrators and 97 School Leaders

	Cost Per Participant-Hour	Cost Per Teacher	Cost Per ADA	Percentage of Total Staff Development Cost	Percentage of Total Classroom Cost
Substitutes	\$2.66	\$210.31	\$9.39	4.59%	0.23%
External Providers	\$0.64	\$50.94	\$2.27	1.11%	0.05%
Miscellaneous and Facilities	\$0.44	\$34.70	\$1.55	0.76%	0.04%
Stipends	\$1.82	\$143.56	\$6.41	3.13%	0.15%
Leaders' Time for Planning and Delivery	\$5.50	\$434.19	\$19.38	9.48%	0.47%
LEVEL I SUBTOTAL: Taxpayers' Current Monetary Investment	\$11.06	\$873.70	\$39.00	19.07%	0.94%
Present Value of Future Salary Increases Resulting From Additional Semester Units	\$36.23	\$2,862.60	\$127.79	62.49%	3.08%
LEVEL II SUBTOTAL, Taxpayers' Current and Future Monetary Investment	\$47.29	\$3,736.30	\$166.80	81.56%	4.02%
Value of Reallocated Instructional Time	\$4.34	\$342.54	\$15.29	7.48%	0.37%
LEVEL III SUBTOTAL: Taxpayers' Total Investment	\$51.62	\$4,078.84	\$182.09	89.04%	4.39%
Investment by Participants	\$6.35	\$501.95	\$22.41	10.96%	0.54%
LEVEL IV GRAND TOTAL: Combined Investment by Taxpayers & Participants	\$57.98	\$4,580.79	\$204.50	100.00%	4.93%

Appendix D

References

- Baltzell, C., and R. Dentler. 1982. "Local Variation in the Selection of School Principals." Paper presented at the annual meeting of the American Educational Research Association, New York City.
- Benveniste, G. 1987. *Professionalizing the Organization*. San Francisco: Jossey-Bass.
- Berman, P., and M.W. McLaughlin. 1978. *Federal Programs Supporting Educational Change, Vol. VIII: Implementing and Sustaining Innovations*. Santa Monica: RAND Corporation.
- Berman, P., and T. Gjelten. 1984. *Improving School Improvement: A Policy Evaluation of the California School Improvement Program. Volume 2: Findings*. Berkeley: Berman, Weiler Associates.
- Bird, T. 1985. *Summary of the 1985 Survey of District Coordinators for the California Mentor Teacher Program*. San Francisco: Far West Laboratory for Educational Research and Development.
- Bossert, S.T., D.C. Dwyer, B. Rowan, and G.V. Lee. 1982. "The Instructional Management Role of the Principal." *Educational Administration Quarterly* 18(3): 34-64.
- David, J. 1985. "Strengthening the State Role in Staff Development." Paper prepared for the California Commission on the Teaching Profession.
- Goodlad, J. 1975. *The Dynamics of Educational Change*. New York: McGraw Hill.
- Gray, J. Forthcoming. "The Bay Area Writing Project Model of University-School Collaboration." In B.R. Gifford (ed.) *School-University Collaborations*. New York: Teachers College Press.
- Greenfield, W. (ed.). 1987. *Instructional Leadership: Concepts, Issues, and Controversies*. Boston: Allyn and Bacon.
- Hanuschek, E.A. 1986. "The Economics of Schooling." *Journal of Economic Literature* 24:1141-1177.
- Joyce, B., and B. Showers. 1981. "Teacher Training Research: Working Hypotheses for Program Design and Directions for Further Study." Paper presented at the annual meeting of the American Educational Research Association, Los Angeles.
- Kanter, R.M. 1983. *The Changemasters: Innovation for Productivity in the American Corporation*. New York: Basic Books.
- Little, J.W. 1987. "Teachers as Colleagues." In V. Richardson-Koehler (ed.) *Educator's Handbook: A Research Perspective*. New York: Longman.
- Little, J.W., C. Long, and J. Guilkey-Amado. 1986. *Expanding Professional Collaboration in Schools: Can Districts Organize Leadership by Teachers?* San Francisco: Far West Laboratory for Educational Research and Development.

- McLaughlin, M.W., and D.D. Marsh. 1979. "Staff Development and School Change." In A. Lieberman and L. Miller (eds.) *Staff Development: New Demands, New Realities, New Perspectives*. New York: Teachers College Press.
- McLaughlin, M.W., and R.S. Pfeifer. In press. *Teacher Evaluation: Improvement, Accountability, and Effective Learning*. New York: Teachers College Press.
- Mohlman, G.G., T. Coladarci, and N.L. Gage. 1982. "Comprehension and Attitude as Predictors of Implementation of Teacher Training." *Journal of Teacher Education*. 33(1):31-36.
- Moore, D., and A. Hyde. 1981. *Making Sense of Staff Development: An Analysis of Staff Development Programs and Their Costs in Three Urban School Districts*. Chicago: Designs for Change.
- Moore, D. and A. Hyde, et al. 1978. *Rethinking Staff Development: A Handbook for Analyzing Your Program and its Costs*. Chicago: Designs for Change.
- Sarason, S. 1971. *The Culture of the School and the Problem of Change*. Boston: Allyn & Bacon.
- Schlechty, P., and B.L. Whitford. 1983. "The Organizational Context of School Systems and the Functions of Staff Development". In G.Griffin (ed.) *Staff Development: Eighty-second Yearbook of the National Society for the Study of Education*. Chicago: University of Chicago Press.
- Showers, B. 1982. *The Transfer of Training: the Contribution of Coaching*. Eugene, OR: Research and Development Center for Education Policy and Management.

STAFF DEVELOPMENT IN CALIFORNIA: PUBLIC AND PERSONAL INVESTMENTS, PROGRAM PATTERNS, AND POLICY CHOICES

California Postsecondary Education Commission Report 88-23

ONE of a series of reports published by the Commission as part of its planning and coordinating responsibilities. Additional copies may be obtained without charge from the Publications Office, California Postsecondary Education Commission, Third Floor, 1020 Twelfth Street, Sacramento, California 95814-3985

Recent reports of the Commission include

88-6 Comments on Educational Equity Plans of the Segments. A Staff Report on the Development of Plans by the State Department of Education, the California State University, and the University of California to Achieve the Educational Equity Goals of Assembly Concurrent Resolution 83 (1984) (February 1988)

88-7 Size, Growth, and Cost of Administration at the California State University. A Report Prepared by Price Waterhouse and MGT Consultants for the California Postsecondary Education Commission (February 1988)

88-8 Overview of the 1988-89 Governor's Budget for Postsecondary Education in California. Testimony by William H. Pickens, Executive Director, California Postsecondary Education Commission (March 1988)

88-9 Faculty Salaries in California's Public Universities, 1988-89. The Commission's 1987 Report to the Legislature and Governor in Response to Senate Concurrent Resolution No. 51 (1965) (March 1988)

88-10 Eligibility of California's 1986 High School Graduates for Admission to Its Public Universities. A Report of the 1986 High School Eligibility Study (March 1988)

88-11 Eligibility for Freshman Admission to the University of California. A Statement to the Regents of the University by William H. Pickens, Executive Director, California Postsecondary Education Commission, February 18, 1988 (March 1988)

88-12 Time to Degree in California's Public Universities. Factors Contributing to the Length of Time Undergraduates Take to Earn Their Bachelor's Degree (March 1988)

88-13 Evaluation of the California Academic Partnership Program (CAPP). A Report to the Legislature in Response to Assembly Bill 2398 (Chapter 620, Statutes of 1984) (March 1988)

88-14 Standardized Tests Used for Higher Education Admission and Placement in California During 1987. The Third in a Series of Annual Reports Published in Accordance with Senate Bill 1758 (Chapter 1505, Statutes of 1984) (March 1988)

88-15 Update of Community College Transfer Student Statistics Fall 1987. University of California, The California State University, and California's Independent Colleges and Universities (March 1988)

88-16 Legislative Update, March 1988. A Staff Report to the California Postsecondary Education Commission (March 1988)

88-17 State Policy for Faculty Development in California Public Higher Education. A Report to the Governor and Legislature in Response to Supplemental Language in the 1986 Budget Act (May 1988)

88-18 to 20 Exploring Faculty Development in California Higher Education. Prepared for the California Postsecondary Education Commission by Berman, Weiler Associates

88-18 Volume One. Executive Summary and Conclusions, by Paul Berman and Daniel Weiler, December 1987 (March 1988)

88-19 Volume Two. Findings, by Paul Berman, Jo-Ann Intili and Daniel Weiler, December 1987 (March 1988)

88-20 Volume Three. Appendix, by Paul Berman, Jo-Ann Intili, and Daniel Weiler, January 1988 (March 1988)

88-21 Staff Development in California's Public Schools. Recommendations of the Policy Development Committee for the California Staff Development Policy Study, March 16, 1988 (March 1988)

88-22 and 23 Staff Development in California Public and Personal Investments, Program Patterns, and Policy Choices, by Judith Warren Little, William H. Gerritz, David S. Stern, James W. Guthrie, Michael W. Kirst, and David D. Marsh. A Joint Publication of Far West Laboratory for Educational Research and Development • Policy Analysis for California Education (PACE), December 1987

88-22 Executive Summary (March 1988)

88-23 Report (March 1988)